AV-K21M2
AV-K21T2
AV-2131EE

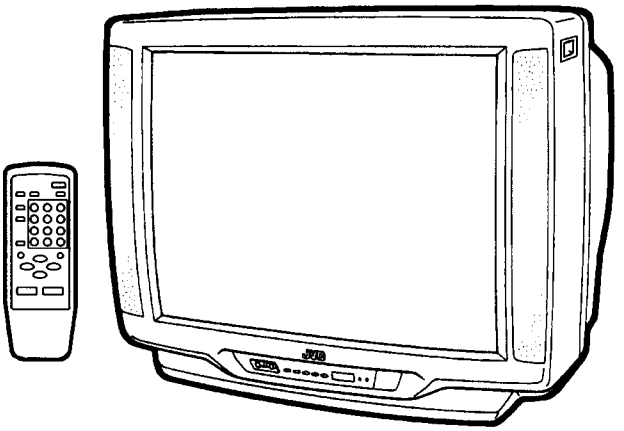
JVC

SERVICE MANUAL

COLOUR TELEVISION

BASIC CHASSIS
CL-M

AV-K21M2(L) / AV-K21T2(L)
AV-K21M2(L)-A / AV-K21T2(L)-A
AV-K21M2(L)-HK / AV-2131EE(L)
AV-K21M2(LB) / AV-K21T2 (LB)



CONTENTS

No.51447
Sep. 1998

SPECIFICATIONS

Item			Content	
			AV-K21M2(L) **AV-K21M2(L)-A** **AV-K21M2(L)-HK** **AV-K21M2(LB)**	**AV-K21T2(L)** **AV-K21T2(L)-A** **AV-2131EE(L)** **AV-K21T2(LB)**
Dimensions(W × H × D)			60.3cm × 45.4cm × 47.4cm	
Mass			23kg	
TV RF System			B / G, I, D / K, K1, M	B / G, I, D / K, K1
Colour System		TV Mode	PAL / SECAM / NTSC3.58 / NTSC4.43	PAL / SECAM
		VIDEO Mode	PAL / SECAM / NTSC3.58 / NTSC4.43	
Receiving Frequency		VHF (VL)	46.25MHz～168.25MHz	
		VHF (VH)	175.25MHz～463.25MHz	
		UHF	471.25MHz～863.25MHz	
		CATV	● Cable TVs of Mid (X-Z, S1-S10) Super (S11-S20) & Hyper (S21-S41) bands receivable	
Intermediate Frequency		VIF Carrier	38.0MHz	
		SIF Carrier	32.5MHz(5.5MHz) 31.5MHz (6.5MHz) 32.0MHz (6.0MHz) 33.5MHz (4.5MHz)	32.5MHz(5.5MHz) 31.5MHz (6.5MHz) 32.0MHz (6.0MHz)
Colour Sub Carrier Frequency			PAL (4.43MHz), SECAM (4.40625MHz / 4.25MHz) NTSC (3.58MHz / 4.43MHz)	
Aerial Input Terminal			75Ω Unbalanced	
Power Input		Rated Voltage	AC120～240V, 50 / 60Hz	
		Operating Voltage	AC90～260V, 50 / 60Hz	
Power Consumption			97W (Max.) / 67W (Avg.)	
Picture Tube			Visible size : 51cm measured diagonally	
High Voltage			26.5kV±1kV(at zero beam current)	
Speaker			5cm × 12 cm Oval type × 2	
Audio Output			3W (monaural)	
Input		Video	1Vp-p, 75Ω, RCA × 2	
		Audio	500mVrms (-4dBs), High impedance, RCA × 2	
Output		Video	1Vp-p, 75Ω, RCA × 1	
		Audio	500mVrms (-4dBs), Low impedance, RCA × 1	
Remote Control Unit			RM-C360 (Battery size : AA/R6/UM-3 × 2)	

Design & specifications are subject to change without notice.

SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏚) side GND and EARTH : (⏚) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.

5. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).

6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.

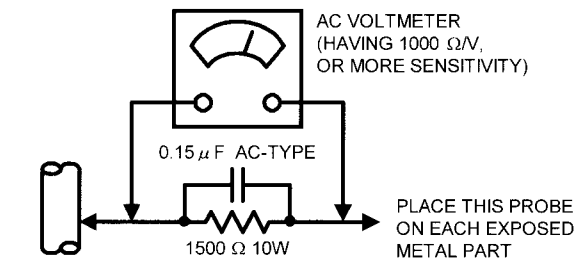
8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

9. **Isolation Check**
   (Safety for Electrical Shock Hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

● **Alternate Check Method**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



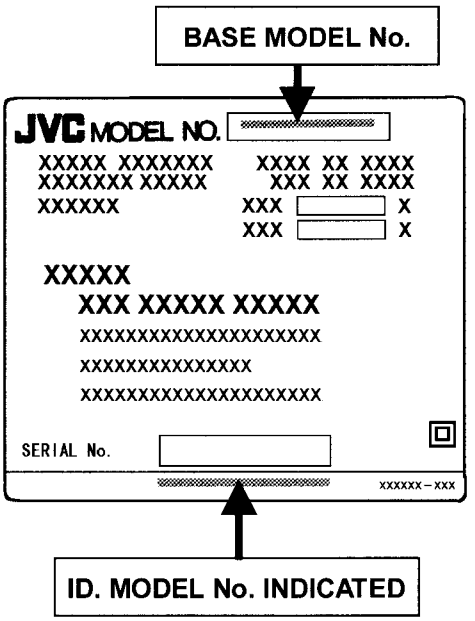
FEATURES

- New chassis design enables use of an interactive on-screen control.
- Wide range voltage (90V~260V) AC power input.
- With AUDIO / VIDEO INPUT & OUTPUT terminal.
- MUTING button can reduce the audio level to zero instantly.
- Functional remote control to operate TV set (for channel select, volume control, power ON/OFF, etc.) from a distance.
- I^2C bus control utilizes single chip ICs for IF, V/C and VSM.
- By means of AUTO PROGRAM, the TV stations can be selected automatically and the TV channels can also be rearranged automatically.

MODEL ID. (IDENTIFICATION)

While referring to the illustration given below, identify each model No. on the rating label affixed to the rear cover of TV set.

RATING LABEL



MODEL No.	INDICATED	MODEL No.	INDICATED
AV-K21M2(L)	←	AV-K21T2(L)	←
AV-K21M2(L)-A	←	AV-K21T2(L)-A	←
AV-K21M2(L)-HK	AV-K21M2L-HK	AV-2131EE(L)	←
AV-K21M2(LB)	←	AV-K21T2(LB)	←

OPERATING INSTRUCTIONS

JVC

COLOUR TELEVISION

AV-A14M2
AV-A14T2
AV-K14M2
AV-K14T2
AV-A21M2
AV-A21T2
AV-K21M2
AV-K21T2

INSTRUCTIONS

Thank you for purchasing this JVC colour television.
To ensure your complete understanding, please read this manual thoroughly before operation.

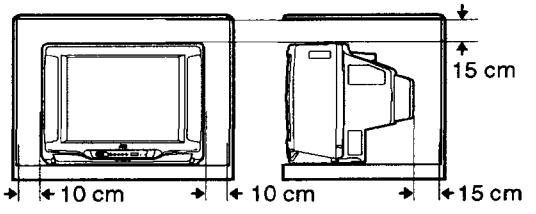
Contents

WARNING:

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:

- TO ENSURE PERSONAL SAFETY, OBSERVE THE FOLLOWING RULES REGARDING THE USE OF THIS TV.
- Operate only from the power source specified on the TV.
- Avoid damaging the power plug and power cord.
- Avoid improper installation and never position this TV where good ventilation is unattainable. When installing this TV distance recommendations must be maintained between the floor and wall, as well as installment in a tightly enclosed area or piece of furniture. Adhere to the minimum distance guidelines shown for safe operation.



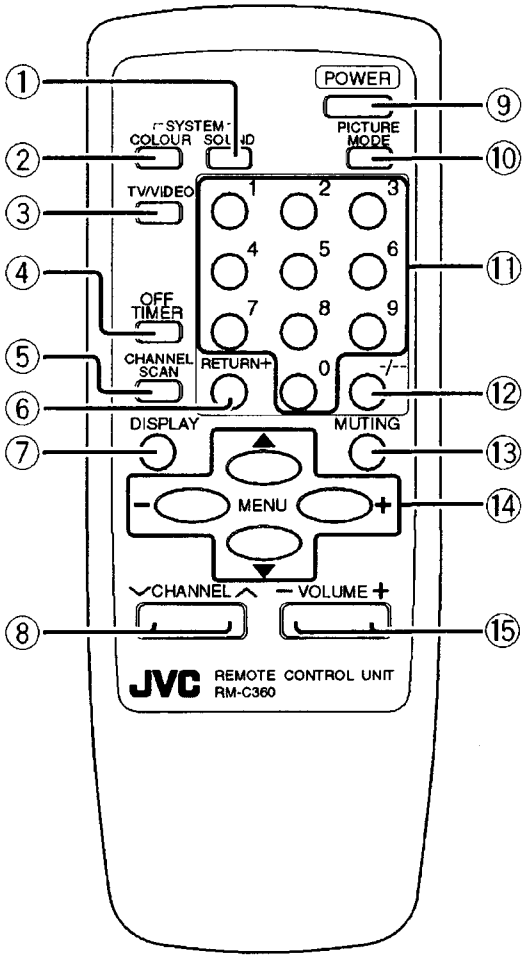
- Do not allow objects or liquid into the cabinet openings.
- In the event of a fault, unplug this TV and call a service technician. Do not attempt to repair it yourself or remove the rear cover.
- When you don't use this TV for a long period of time, be sure to disconnect the power plug from the AC outlet.

In principle, the operation of the local models is carried out in the same method as for the corresponding basic models. For the operating method of each local model, use the INSTRUCTION MANUAL for the basic models listed below.

Colour system	Basic models	Local models
MALTI. type (PAL/SECAM/NTSC)	**AV-A14M2**	AV-A14M2(L) / AV-A14M2(L)-A / AV-A14M2(L)-HK / AV-A14M2(L)U
	AV-K14M2	AV-K14M2(L) / AV-K14M2(L)-A / AV-K14M2(L)-HK
	AV-A21M2	AV-A21M2(L) / AV-A21M2(L)-A / AV-A21M2(L)-HK / AV-A21M2(L)U / AV-A21M2(LB)
	AV-K21M2	AV-K21M2(L) / AV-K21M2(L)-A / AV-K21M2(L)-HK / AV-K21M2(LB)
TRIPLE type (PAL/SECAM)	**AV-A14T2**	AV-A14T2(L) / AV-A14T2(L)-A / AV-A1411EE(L) / AV-1432(L)-SC
	AV-K14T2	AV-K14T2(L) / AV-K14T2(LB) / AV-K14T2(L)-A / AV-1431EE(L)
	AV-A21T2	AV-A21T2(L) / AV-A21T2(LB) / AV-A21T2(L)-A / AV-A2132(L)-SC / AV-2111EE(L)
	AV-K21T2	AV-K21T2(L) / AV-K21T2(LB) / AV-K21T2(L)-A / AV-2131EE(L)

Locations

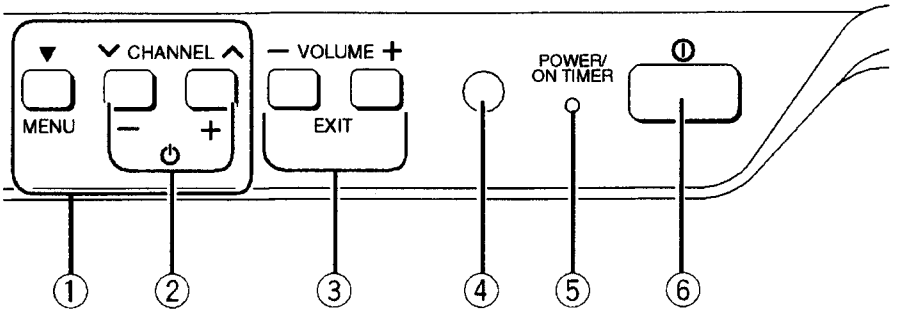
Locations of remote control buttons



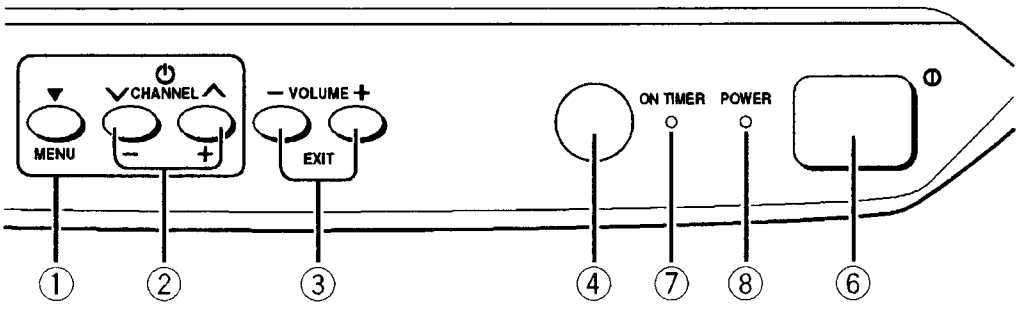
①	SOUND SYSTEM button	p.15
②	COLOUR SYSTEM button	p.15
③	TV/VIDEO button	p.14
④	OFF TIMER button	p.17
⑤	CHANNEL SCAN button	p.13
⑥	RETURN + button	p.17
⑦	DISPLAY button	p.17
⑧	CHANNEL ∨/∧ buttons	p.12
⑨	POWER button	p.6,12,13
⑩	PICTURE MODE button	p.15
⑪	Number buttons	p.12
⑫	-/-- button	p.12
⑬	MUTING button	p.13
⑭	MENU buttons • MENU ▲/▼ buttons • MENU –/+ buttons	
⑮	VOLUME –/+ buttons	p.13

Locations of front panel buttons and lamps

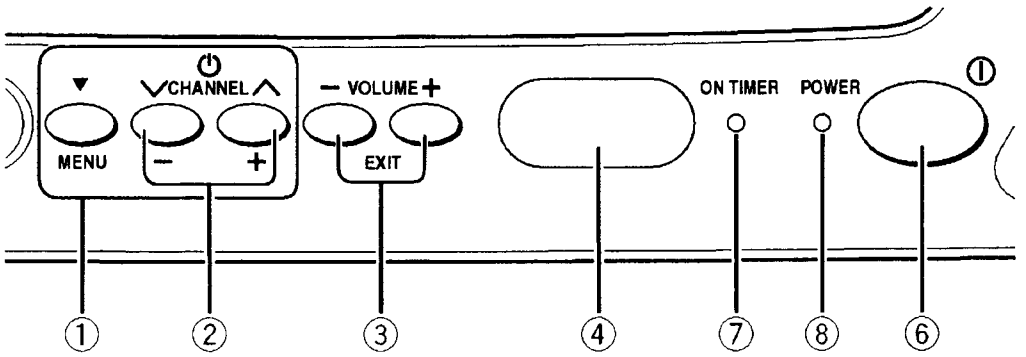
<AV-A14M2/AV-A14T2>



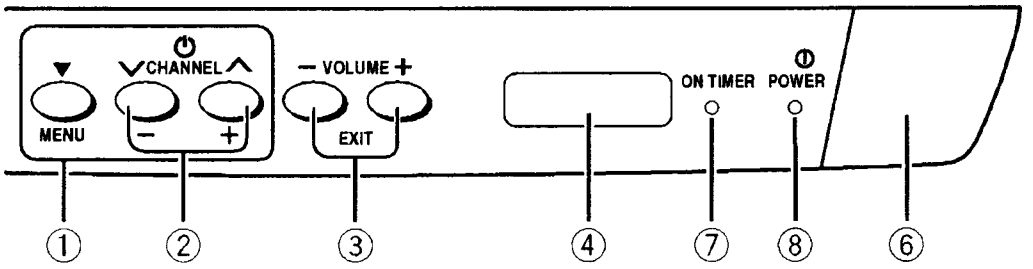
<AV-K14M2/AV-K14T2>



<AV-A21M2/AV-A21T2>



<AV-K21M2/AV-K21T2>



① MENU buttons • MENU button • MENU –/+ buttons	p.21
② CHANNEL∨/∧ buttons	p.13
③ VOLUME –/+ buttons	p.13
④ Remote control sensor	
⑤ POWER/ON TIMER lamp	p.6,13,19
⑥ Main power button	p.6,12,13
⑦ ON TIMER lamp	p.19
⑧ POWER lamp	p.6,13

Preparation

1. Connecting the aerial and external devices

Notes:

- For further details, refer to manuals provided with the devices you are connecting.
- Connecting cables are not supplied.
- The front and rear AUDIO/VIDEO input jacks are directly connected so that input to either jack is output through both. You cannot provide input to both the front and rear jacks at the same time. Disconnect one input, or use one of the jacks as an output jack only (for monitoring or recording).
- The rod aerial and matching aerial adapter is supplied with the AV-A14M2/AV-A14T2/AV-K14M2/AV-K14T2.

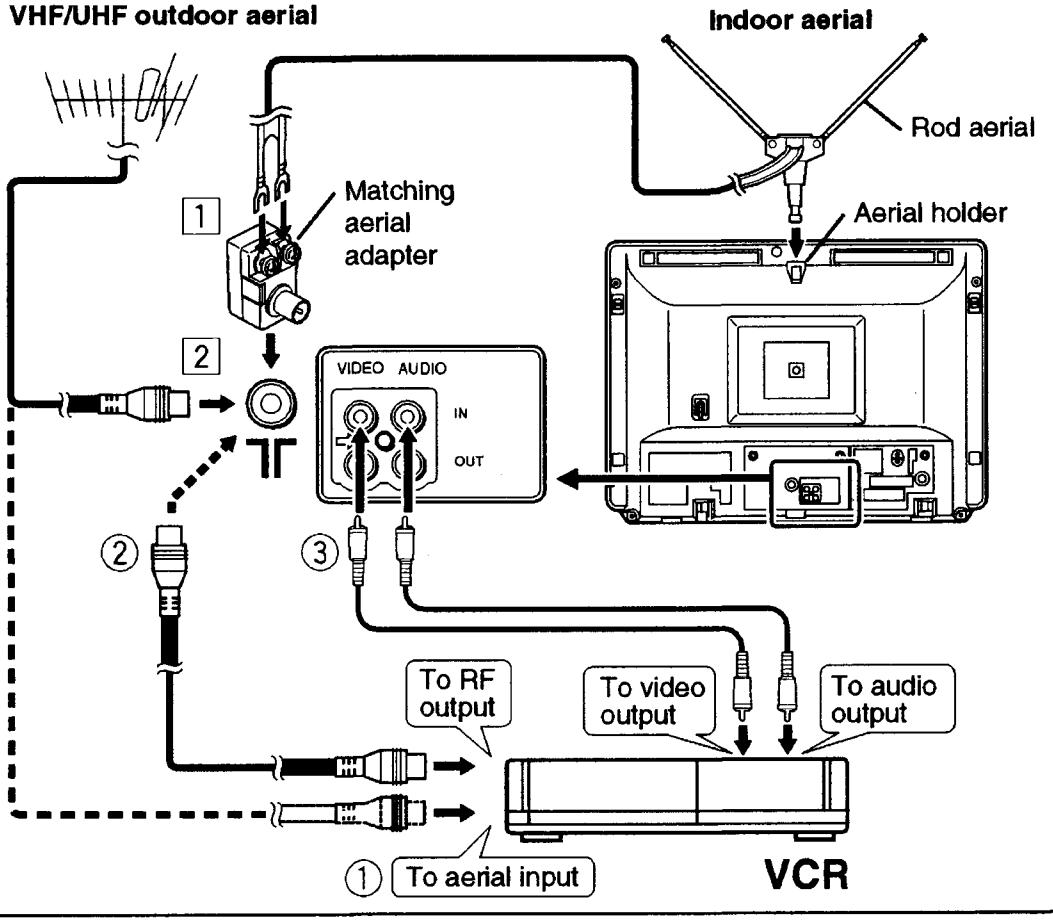
■ Connecting the aerial and VCR

If not connecting a VCR (video cassette recorder), do 1 → 2 or 2 only.
If connecting a VCR, proceed ① → ② → ③.

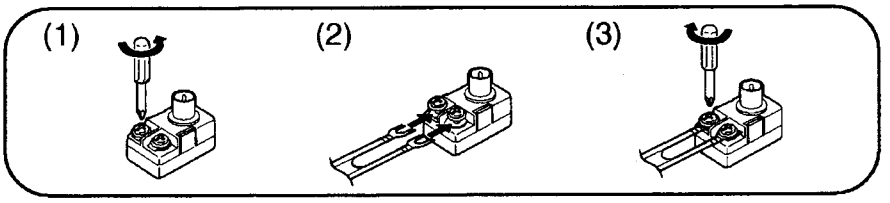
- You can view images from the VCR without doing ③. For details, see "To view images from a VCR connected to the TV with only an aerial cable" on page 14.

To install rod aerial:

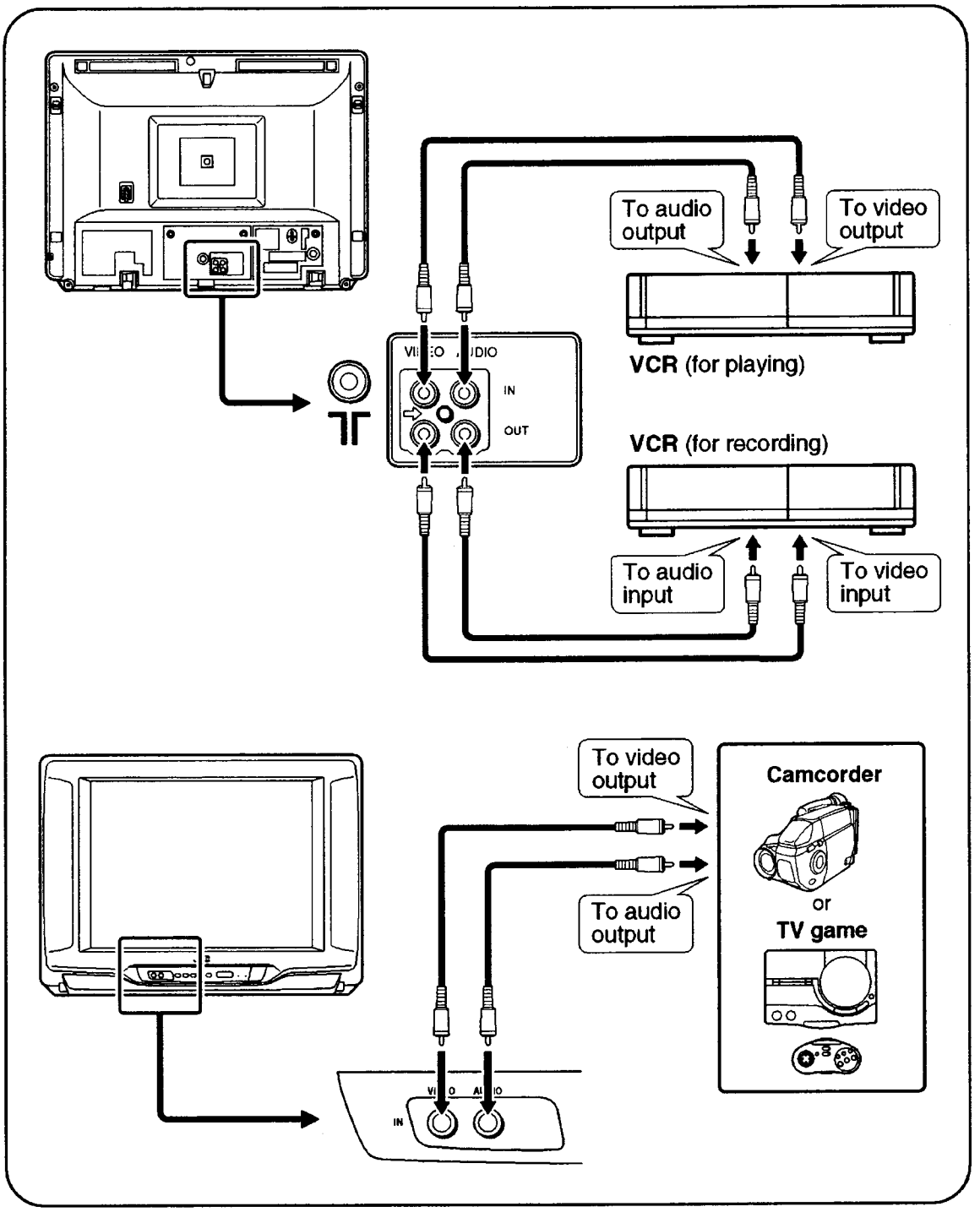
Install into the top-rear aerial holder. Once installed, it cannot be removed.



To set up matching aerial adapter



■ Connecting other external devices

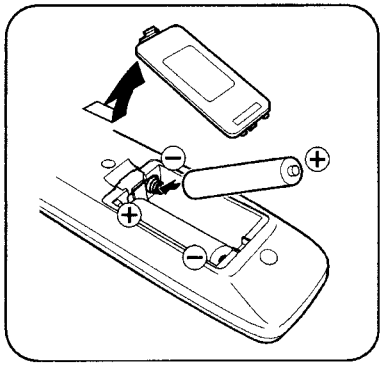


2. Connecting the power cord

Insert the Power plug into an AC outlet.

3. Inserting batteries into the remote control

Correctly insert two batteries, observing the ⊕ and ⊖ polarities, inserting the ⊖ end first.



CAUTION:

- Follow the cautions printed on the batteries.

Notes:

- Use AA/R6/UM-3 dry cell batteries.
- Battery life is approximately six months to one year depending on frequency of use.
- If the remote control operates erratically, replace the batteries.
- We recommend that you use the supplied batteries initially and replace them as soon as operation becomes erratic. The supplied batteries are for testing, not regular use.

4. Turning your TV on

1. Press the Main power button on the TV to turn the TV's main power on.

For AV-A14M2 and AV-A14T2:
The POWER/ON TIMER lamp lights green (main power on).
For other models:
The POWER lamp lights red (main power on).

If image dose not appear:

Your TV is in the standby mode. Press the POWER button on the remote control to turn your TV on.

- You can also turn on your TV by pressing the CHANNEL∨/∧ button on your TV.

To turn your TV off:

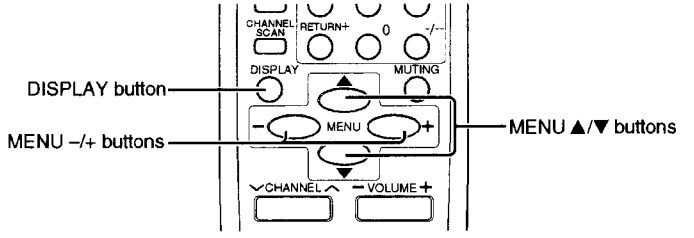
Press the POWER button on the remote control. Your TV enters the standby mode.

To turn the TV's main power off:

Press the Main power button on the TV.
For AV-A14M2 and AV-A14T2:
The POWER/ON TIMER lamp goes off.
For other models:
The POWER lamp goes off.

5. Selecting the on-screen language

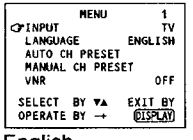
You can select one of three languages for the on-screen display. The displayed menus on the screen are described in the selected language.
In this manual, on-screen descriptions are given in English. Select ENGLISH.



- For details on menu operations using the front control buttons on the TV, see "Menu operations using the front control buttons on the TV" on page 21.

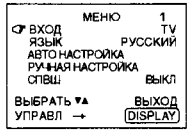
1. Press MENU ▲/▼ to display the following menu.

The following menu is displayed in one of three languages.



English

Chinese



Russian

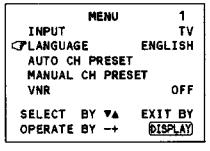
Note:

- If a different menu is displayed, repeatedly press the MENU ▲/▼ button until this menu is displayed.
- If the menu appears in English, the TV's on-screen language is already set to English, so you can skip steps 2 and 3.

2. Press MENU ▲/▼ to select the second item on the menu.

3. Press MENU –/+ to select ENGLISH .

The menu is displayed in English.



4. Proceed to "6. Presetting TV stations" on the following page.

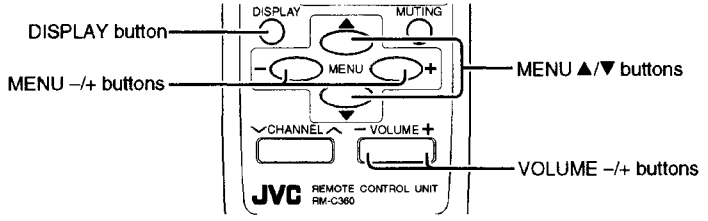
- If you want to complete operations at this stage, press the DISPLAY button to turn the menu display off.

6. Presetting TV stations

To view a TV programme, you must first preset TV stations to channels on the TV. This TV has 100 channels (channel 1 to 99 and channel AV).
You can choose between two functions, the Auto Channel Preset and Manual Channel Preset and preset TV stations to channels on TV.

Note:

- After you have finished presetting, you can set undesired channels to be skipped over, see "Skip" on page 11.



- For details on menu operations using the front control buttons on the TV, see "Menu operations using the front control buttons on the TV" on page 21.

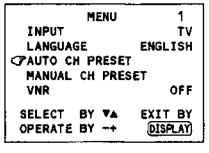
■ Auto Channel Preset

You can automatically preset all TV stations that can be received on your TV to channels in one simple operation.

Notes:

- When you use this function, no station is preset to the channel AV. Channel AV is offered for viewing images from a VCR connected to your TV with only an aerial cable. For more details, see "To view images from a VCR connected to the TV with only an aerial cable" on page 14.
- If the Auto Channel Preset does not work well, preset TV stations manually. For details, see "Manual Channel Preset" on page 9.

1. Press MENU ▲/▼ to select AUTO CH PRESET in the "MENU 1" menu.



To display this menu:
Repeatedly press MENU ▲/▼ button until it is displayed.

2. Press MENU – /+ to start the Auto Channel Preset function.
">>> ON SEARCH" is displayed on the screen.

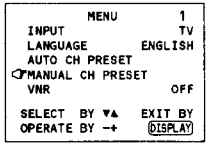
When you have finished presetting all TV channels that can be received on your TV, the display will go out and the Auto Channel Preset function will end.

- To stop the Auto Channel Preset, press the MENU –/+ button.

■ Manual Channel Preset

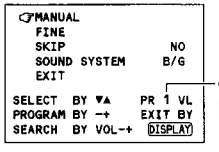
You can manually preset the desired TV stations to the desired channels.

1. Press MENU ▲/▼ to select MANUAL CH PRESET in the "MENU 1" menu.



To display this menu:
Repeatedly press the MENU ▲/▼ button until it is displayed.

2. Press MENU –/+.
The sub-menu is displayed.



- The channel No. is displayed as a PR No. For example, channel 1 will be displayed as PR 1. However, channel AV will be displayed as AV.

3. Press MENU –/+ to select the channel No. to be preset.

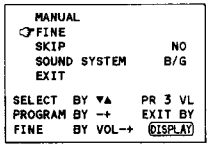
4. Press VOLUME –/+ to start selection of the TV station.
">>>" or "<<<" is displayed on the screen.

When a TV station is received, the ">>>" or "<<<" display goes out, and the TV station is preset to the currently selected channel No.

- If you have selected the wrong TV station for preset, repeatedly press the VOLUME –/+ button until the desired TV station is selected.
- To stop the Manual Channel Preset, press any button other than the VOLUME –/+ button.

If the picture is not clear:
Use the Fine function to fine-tune the TV station.

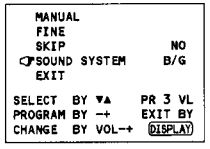
1. Press MENU ▲/▼ to select FINE.



2. Hold VOLUME –/+ down to fine-tune the TV station so that the best image is displayed on screen.
">" or "<" indicates that the TV station is being fine-tuned.

(Continued on next page)

5. Press MENU ▲/▼ to select SOUND SYSTEM.



6. Press VOLUME –/+ to select the appropriate sound system.

- For the sound systems in each country or region, refer to the table "The Broadcasting systems of Each Country or Region" below.

7. Press MENU ▲/▼ to select MANUAL.

8. Repeat steps 3 to 7 if you want to preset another TV station to a channel.

9. Press DISPLAY to turn the display off.

The Broadcasting Systems of Each Country or Region

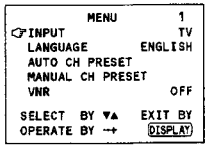
Area	Country or Region	System	
		Colour	Sound
Asia, Middle East	Bahrain, Kuwait, Oman, Qatar, United Arab Emirates, Yemen, etc. Indonesia, Malaysia, Singapore, Thailand, India, etc.	PAL	B/G
	China, Vietnam, etc.	PAL	D/K
	Hong Kong, etc.	PAL	I
	Islamic Republic of Iran, Lebanon, Saudi Arabia, etc.	SECAM	B/G
	Philippine, Taiwan, Myanmar, etc.	NTSC	M
Europe	Russia, etc.	SECAM	D/K
	Czech Republic, Poland, etc.	PAL	D/K
	Germany, Holland, Belgium, etc.	PAL	B/G
	UK, etc.	PAL	I
Oceania	Australia, New Zealand, etc.	PAL	B/G
Africa	Republic of South Africa, etc.	PAL	I
	Nigeria, etc.	PAL	B/G
	Egypt, Morocco, etc.	SECAM	B/G

■ Skip

When selecting channels, you can set undesired channels to be skipped. Channels set to be skipped cannot be selected by the CHANNEL V/Λ buttons nor the CHANNEL SCAN button.

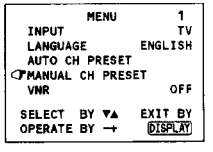
- Channels to which a station has not been preset are automatically set to be skipped.

1. Press MENU ▲/▼ to display the "MENU 1" menu.



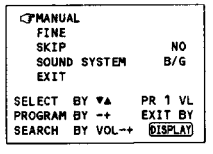
- If a different menu is displayed, repeatedly press the MENU ▲/▼ button until this menu is displayed.

2. Press MENU ▲/▼ to select MANUAL CH PRESET.

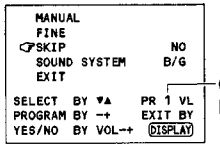


3. Press MENU –/+.

The sub-menu is displayed.



4. Press MENU ▲/▼ to select SKIP.

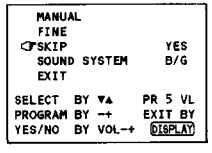


- The channel No. is displayed as a PR No. For example, channel 1 will be displayed as PR 1. However, channel AV will be displayed as AV.

5. Press MENU –/+ to select the channel you want to skip.

6. Press VOLUME –/+ to select YES.

The channel you selected is set to be skipped.



To cancel the Skip:

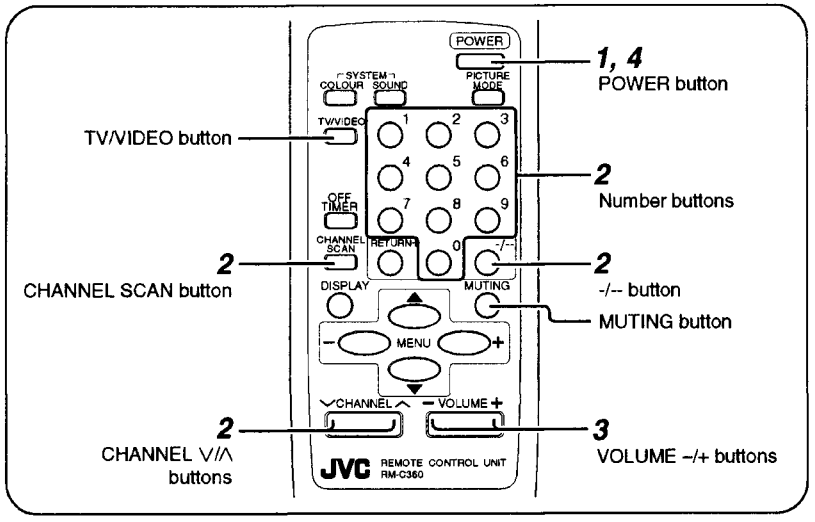
select NO.

7. Repeat steps 5 and 6 if you want to set another channel to skip.

8. Press DISPLAY to turn the display off.

Viewing a Television Programme

Using the remote control



1. Press POWER to turn your TV on.

Notes:

- If your TV does not turn on, press the Main power button on the TV then press the POWER button again.
- You can also turn on your TV by pressing any of the following buttons;
  – the CHANNEL V/Λ button
  – the Number buttons
  – the TV/VIDEO button

2. Select a PR channel.

■ **Up/ down selection**
Press CHANNEL V/Λ.

■ **Direct selection**

1. **Repeatedly press the -/- - button to select the desired mode.**

- : 1-digit mode
To select a channel with a 1-digit number.

- - : 2-digit mode
To select a channel with a 1-digit number or a 2-digit number.

2. **Press the Number buttons to select a channel.**

For 1-digit mode:
(example)
Channel 6 → Press 6.

For 2-digit mode:
(example)
Channel 6 → Press 0, 6.
Channel 16 → Press 1, 6.

- When you want to select channel AV, press 0 in 1-digit mode or 00 in 2-digit mode.

■ **Channel Scan selection**
You can search for the channel you want to view while scanning all of the channels that can be viewed on this TV.

1. **Press CHANNEL SCAN.**
   Channels will be scanned in channel No. order.
2. **When the channel that you want to view appears, press CHANNEL SCAN again before scanning for the next channel begins.**

Note:

- Up/down and Channel Scan selections cannot be selected for channels to which the Skip has been set to YES. (See "Skip" on page 11.)

If the colour is abnormal:
Repeatedly press the COLOUR SYSTEM button to select the appropriate colour system. For details, see "Colour System" on page 15.

3. Press VOLUME –/+ to adjust the sound.

To temporarily render the sound inaudible:
Press the MUTING button.
- To return the sound, press the MUTING button again.

If the sound is abnormal:
Repeatedly press the SOUND SYSTEM button to select the appropriate sound system. For details, see "Sound System" on page 15.

4. To turn your TV off, press POWER.

Note:

- We recommend that you press the Main power button on the TV to turn the main power off if you do not plan to use your TV for a long time or if you wish to save energy.

Using the front panel buttons on the TV

1. Press CHANNEL V/Λ to turn your TV on.

Note:

- If your TV does not turn on, press the Main power button and then press the CHANNEL V/Λ button again.

2. Press CHANNEL V/Λ to select a channel.

3. Press VOLUME –/+ to adjust the sound.

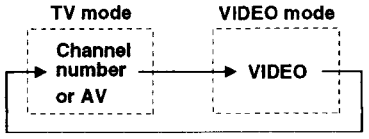
4. To turn your TV off, press the Main power button to turn the main power off.
For AV-A14M2 and AV-A14T2:
The POWER/ON TIMER lamp goes off.
For other models:
The POWER lamp goes off.

- If you press the Main power button again, your TV turns on immediately. Step 1 is no longer required.

Viewing Images from an External Device

You can view images from VCRs or other external devices connected to your TV.

1. Press TV/VIDEO to select the VIDEO mode.



TV mode:
This mode is for viewing TV programmes. Press the TV/VIDEO button, or press the CHANNEL∨/∧ button, or press the number buttons to return to this mode.

To view images from a VCR connected to the TV with only an aerial cable:
Your VCR must be preset to the channel AV of this TV.
Thoroughly read the manual of your VCR, and preset your VCR to the channel AV using the Manual Channel Preset function on page 9.
As a result, you can view images from your VCR when you select the channel AV in the TV mode.

If the colour is abnormal:
Repeatedly press the COLOUR SYSTEM button to select the appropriate colour system. For details, see "Colour System" on page 15.

To select the VIDEO mode using the front control buttons on the TV:
When not using the remote control, you can select the VIDEO mode using the MENU buttons on the TV.

1. Repeatedly press the MENU button on the TV to select INPUT from "MENU 1" menu.

2. Press the MENU + button on the TV.
TV mode changes to VIDEO mode.

Note:
- For details, see "Menu operations using the front control buttons on the TV" on page 21.

Sound and Picture

Colour System

If the colour is abnormal, select the appropriate colour system. Each press of the COLOUR SYSTEM button changes the colour system as follows.

In TV mode (channel 1 to 99 and AV):
<AV-A14M2/AV-K14M2/AV-A21M2/AV-K21M2>

AUTO → PAL → SECAM → NTSC4.43 → NTSC3.58 →

<AV-A14T2/AV-K14T2/AV-A21T2/AV-K21T2>

AUTO → PAL → SECAM →

In VIDEO mode:

AUTO → PAL → SECAM → NTSC4.43 → NTSC3.58 →

AUTO:
Automatic colour system selection.

Notes:
- For the colour systems in each country or region, see the table "The Broadcasting Systems of Each Country or Region" on page 10.
- If the colour is abnormal even though you selected AUTO, change the appropriate colour system manually.

Sound System

If the sound is abnormal, select the appropriate sound system. Each press of the SOUND SYSTEM button changes the sound system as follows.

<AV-A14M2/AV-K14M2/AV-A21M2/AV-K21M2>

B/G → I → D/K → M →

<AV-A14T2/AV-K14T2/AV-A21T2/AV-K21T2>

B/G → I → D/K →

Notes:
- For the sound systems in each country or region, see the table "The Broadcasting Systems of Each Country or Region" on page 10.
- You cannot select any sound system when in VIDEO mode.

Picture Mode

You can select one of three picture adjustment modes.
Repeatedly press the PICTURE MODE button to select the desired mode.

BRIGHT:
Heightens contrast and sharpness.

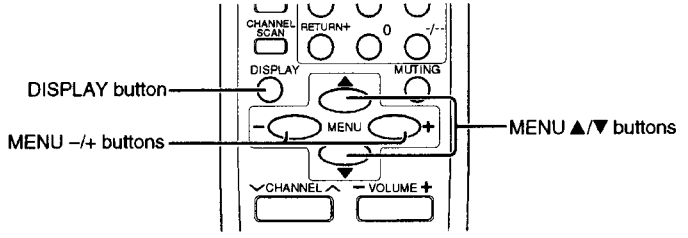
STANDARD:
Standardizes picture adjustments.

SOFT:
Softens contrast and sharpness.

Note:
- Pressing the PICTURE MODE button returns all the picture settings in the "MENU 3" menu to their default settings.

Picture Adjustment

You can adjust the picture as you like.

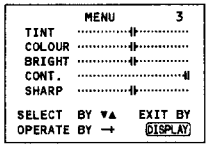


- For details on menu operations using the front control buttons on the TV, see "Menu operations using the front control buttons on the TV" on page 21.

1. Press MENU ▲/▼ to display a menu.

2. Press MENU ▲/▼ repeatedly to display the desired menu.

Display the "MENU 3" menu.



3. Press MENU ▲/▼ to select an item and press MENU –/+ to adjust it.

–	Item	+
Reddish	TINT (tint)	Greenish
Lighter	COLOUR (colour depth)	Deeper
Darker	BRIGHT (brightness)	Brighter
Lower	CONT. (contrast)	Higher
Softer	SHARP (sharpness)	Sharper

Note:

- TINT (tint) is displayed only when viewing images from NTSC3.58 or NTSC4.43 colour systems.

4. Press DISPLAY to turn the display off.

Other Features

Dispaly

You can continuously display the current channel number or VIDEO mode on the screen.
Press the DISPLAY button.
To turn the display off, press the DISPLAY button again.

Note:

- When selecting a channel or VIDEO mode with no input signal, indication of selected channel or VIDEO mode becomes fixed on the screen.

Off Timer

You can set this TV to turn off automatically within a specified period of time.
Repeatedly press the OFF TIMER button to select the period of time.

- You can set the period of time a maximum of 120 minutes in 10 minute increments.
- 1 minute before the Off Timer turns off the TV, "GOOD NIGHT!" displays.

To display the remaining time:
Press the OFF TIMER button once.

To cancel the Off Timer:
Press the OFF TIMER button to return the period of time to 0.

Note:

- The Off Timer will not turn off the TV's main power.

Return +

By setting a channel to "Return channel", you can return to that channel with one touch.

1. Press CHANNEL V/Λ or the Number buttons to select a channel to set to "Return channel".

2. Press RETURN + for more than 3 seconds continuously.
"RETURN PLUS PROGRAMMED!" appears.

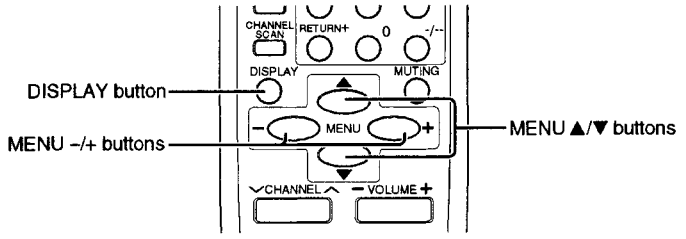
3. When viewing another channel, press RETURN +.
The channel changes to the channel set for "Return channel".

To cancel the channel set for "Return channel":
Press the RETURN + button for more than 3 seconds continuously.
- "RETURN PLUS CANCELLED!" appears.

Notes:

- When you turn the TV off, the "Return channel" setting will be canceled.
- When you press the RETURN + button while viewing the channel set for "Return channel", the channel changes to the previously viewed channel.
- When you press the RETURN + button while in a VIDEO mode, the mode switches to TV mode. To return to the channel set for "Return channel", press the RETURN + button again.

When there is no setting for "Return channel":
When you press the RETURN + button, the channel changes to the previously viewed channel.

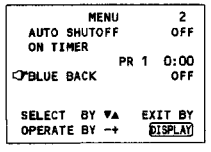


- For details on menu operations using the front control buttons on the TV, see "Menu operations using the front control buttons on the TV" on page 21.

Blue Back

You can mute the sound and change the picture into a blue screen while no signals come into the TV, or when the input signals are unstable.

1. Repeatedly press MENU ▲/▼ to display the "MENU 2" menu, and press MENU ▲/▼ to select BLUE BACK.



2. Press MENU –/+ to select "ON" or "OFF."

ON:
Activates the Blue Back.

OFF:
Cancels the Blue Back.

Notes:

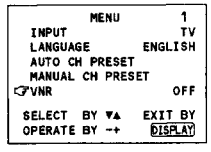
- To view a broadcast even when the reception signal is poor, set the Blue Back to OFF.
- Even when the Blue Back is set to OFF the sound may not be audible.
- The Blue Back function does not operate in VIDEO mode

3. Press DISPLAY to turn the display off.

VNR (Video Noise Reduction)

You can reduce the picture noise.

1. Repeatedly press MENU ▲/▼ to display the "MENU 1" menu, and press MENU ▲/▼ to select VNR.



2. Press MENU –/+ to select "ON" or "OFF."

ON:
Activates the VNR. Select "ON" when viewing a noisy picture.

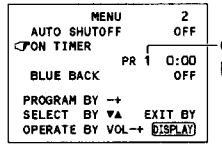
OFF:
Cancels the VNR.

3. Press DISPLAY to turn the display off.

On Timer

Your TV will automatically turn on and tune into the channel you want after a certain period of time you have specified.

1. Repeatedly press MENU ▲/▼ to display the "MENU 2" menu, and Press MENU ▲/▼ to select ON TIMER.



2. Press MENU –/+ to select a channel you want to view when the TV turns on.

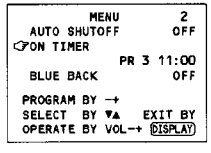
Note:

- You cannot select the channel AV, the VIDEO modes, and the channels for which the Skip is set (See "Skip" on page 11).

3. Press VOLUME –/+ to select the period of time after which you want to turn on the TV.

For AV-A14M2 and AV-A14T2:
The POWER/ON TIMER lamp changes from green to red and the On Timer starts.
For other models:
The ON TIMER lamp lights and the On Timer starts.

- Each time you press the button, the period of time changes in 15 minute intervals (up to 12 hours).



To cancel the On Timer:
Press the VOLUME –/+ button to return the period of time to "0:00".

4. Press DISPLAY to turn the display off.

5. Press POWER to turn the TV off.
POWER/ON TIMER lamp or ON TIMER lamp will stay lit.

Notes:

- If you turn off the TV's main power by pressing the Main power button, the On Timer setting is canceled.
- If you do not turn off the TV after starting the On Timer, once the time set for the On Timer is reached, the channel will automatically switch to the channel set for the On Timer.

While the On Timer is operating:
The POWER/ON TIMER lamp or ON TIMER lamp lights.

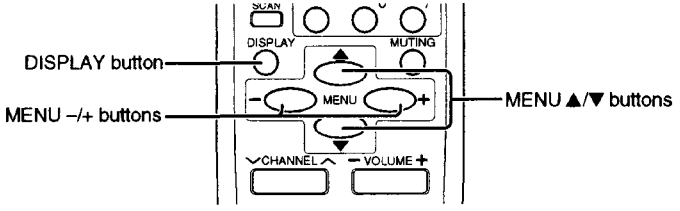
When the time set for the On Timer is reached:
The TV automatically turns on and the channel set for the On Timer is displayed.

Notes:

- For safety reasons the TV will automatically turn off if no operations are made within approximately two hours after the TV is turned on with the On Timer.
- The Off Timer and Auto Shutoff have priority over the On Timer.

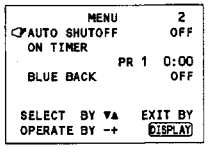
Auto Shutoff

You can set your TV to turn off if no signals are received for about 15 minutes or longer after the end of a broadcast.

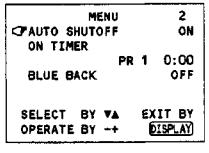


- For details on menu operations using the front control buttons on the TV, see "Menu operations using the front control buttons on the TV" on page 21.

1. Press MENU ▲/▼ to display the "MENU 2" menu, and press MENU ▲/▼ to select AUTO SHUTOFF.



2. Press MENU –/+ to select "ON" or "OFF".



ON:
Activates the Auto Shutoff.
OFF:
Cancels the Auto Shutoff.

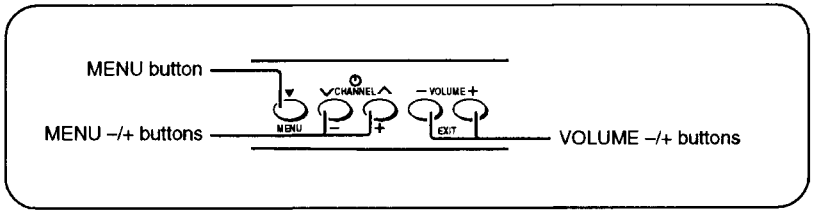
3. Press DISPLAY to turn the display off.

Notes:

- The Auto Shutoff function does not turn off the TV's main power.
- The Auto Shutoff will not work for the VIDEO mode.

Menu operations using the front control buttons on the TV

You can operate functions in menus using the front control buttons on the TV without having to use the remote control.



1. Press MENU to display the menu.

If the desired menu is not displayed:
Repeatedly press the MENU button until the desired menu is displayed.

2. Repeatedly press MENU to select the desired function or item.

To select a function or item above the currently selected function or menu:
Repeatedly press the MENU button to proceed to another menu, and then repeatedly press the MENU button again to return to the original menu. Then select the function or item.

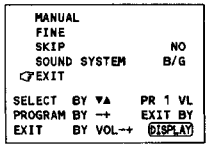
3. Press MENU –/+ or VOLUME –/+ to carry out the desired operation.

- For details, see the description for the respective function.

4. Press VOLUME –/+ to turn the menu display off.

If the sub-menu is displayed:
The sub-menu cannot be turned off by the VOLUME –/+ button when it is displayed. Follow the procedure below to turn the sub-menu display off.

1. **Press MENU to select EXIT.**



2. **Press VOLUME –/+ to turn the sub-menu display off.**

Troubleshooting

Important: Review all the instructions in this manual.

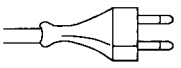
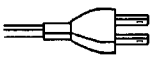
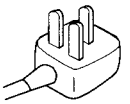
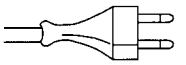
Problem	Action
Cannot turn TV on	Press the Main power button (see p.6). Insert the power plug in an AC outlet.
No picture nor sound	Press the TV/VIDEO button to select the correct mode (see p.14). Check the aerial connections.
Remote control inoperable	Replace the batteries (see p.6).
The TV turns on suddenly.	The TV will automatically turn on when the On Timer is operated (see p.19).
The TV turns off suddenly.	The TV will automatically turn off in the following cases. • When the Off Timer or Auto Shutoff is operated (see p.17 and p.20). • When no operations are made within approximately two hours after the TV was turned on with the On Timer (see p.19).
Abnormal sound	Select the appropriate sound system (see p.15).
Abnormal colour	Adjust the colour and brightness (see p.16). Select the appropriate colour system (see p.15). Set the Picture mode to STANDARD (see p.15).
Lines or streaks in picture (interference)	Move the components apart until the interference disappears. Reposition the aerial.
Spotted picture (crosstalk)	Move the aerial away from the source of interference. Replace the aerial cable with a coaxial cable, which is less prone to interference.
Double picture (ghost)	Reposition the aerial. Replace with an aerial with good directionality.
Snowy picture (image noise)	Check the aerial connection and aim it correctly. Replace or repair the aerial.
The TV channel changes suddenly.	The channel will automatically be changed when the On Timer operates (see p.19).
The screen turns blue	Is the Blue Back set to ON (see p.18) ?

The following are normal occurrences and are not the result of TV malfunctions:

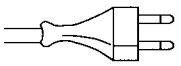
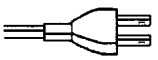
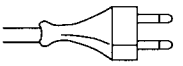
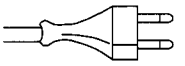
- When you touch the CRT surface, you might feel a slight charge of static electricity. This is because the CRT contains static electricity; it does not affect the human body.
- Your TV may emit a crackling sound due to a sudden change in temperature. There is no problem unless the picture or sound is abnormal.
- When a still bright image (of a white dress, for example) appears on the screen, the image may be coloured. This problem occurs in all CRTs, and when the bright image disappears, the colouration also disappears.
- This TV is equipped with a microcomputer that may operate abnormally due to interference from external devices. If this happens, press the Main power button to turn the main power off and disconnect the power plug from the AC outlet. Then, reconnect the power plug to the AC outlet and press the Main power button again.

MAIN DIFFERENCE LIST

● MULTI. TYPE MODEL

⚠	MODEL No. / Parts Name	AV-K21M2(L) [SCL-1213A-H2]	AV-K21M2(L)-A [SCL-1213A-H2]	AV-K21M2(L)-HK [SCL-1213A-H2]	AV-K21M2(LB) [SCL-1220A-H2]
⚠	PICTURE TUBE	A51LMV20X	←	←	A51LEC065X
⚠	DEF YOKE	CE20336-00A	←	←	CE20332-00A
⚠	RATING LABEL	CM22925-001	CM22880-002	CM22925-012	CM22925-001
⚠	POWER CORD	QMP40D0-200J5	QMPR010-200-E2	QMPN050-200-E2	QMP40D0-200J5
					
⚠	INST BOOK	LCT0276-001A-H	←	LCT0282-001A-H	LCT0276-001A-H
⚠	DIGEST MANUAL	LCT0277-001A-H	LCT0279-001A-H	×	LCT0277-001A-H
	CONVERSION PLUG	×	QAM0055-001	×	×

● TRIPLE TYPE MODEL

⚠	MODEL No. / Parts Name	AV-K21T2(L) [SCL-1212A-H2]	AV-K21T2(L)-A [SCL-1212A-H2]	AV-2131EE(L) [SCL-1212A-H2]	AV-K21T2(LB) [SCL-1221A-H2]
⚠	PICTURE TUBE	A51LMV20X	←	←	A51LEC065X
⚠	DEF YOKE	CE20336-00A	←	←	CE20332-00A
⚠	RATING LABEL	CM22925-010	CM22880-002	CM22925-009	CM22925-010
⚠	POWER CORD	QMP40D0-200J5	QMPR010-200-E2	QMP40D0-200J5	←
					
	FRONT CABINET	CM12955-013-H	←	CM12955-019-H	CM12955-013-H
	PACKING CASE	CP11781-021-H	CP11781-033-H	CP11781-034-H	CP11781-021-H
⚠	INST BOOK	LCT0276-001A-H	←	LCT0285-001A-H	LCT0276-001A-H
⚠	DIGEST MANUAL	LCT0278-001A-H	LCT0279-001A-H	LCT0278-001A-H	←
	CONVERSION PLUG	×	QAM0055-001	×	×
	WARRANTY CARD	×	×	BT-54012-1	×

SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

REMOVING THE REAR COVER

1. Unplug the power supply cord.
2. Remove the **7** screws marked **A&B** as shown in figure.
3. Withdraw the rear cover toward you.

REMOVING THE PW BOARD

- After removing the rear cover.

1. Slightly raise the both sides of the PW BOARD by hand and withdraw the PW BOARD backward.
   (If necessary, take off the wire clamp, connectors etc.)

REMOVING THE SPEAKER

- After removing the rear cover.

1. Remove the 2 screws marked **C** as shown in figure.
2. Follow the same steps when removing the other hand speaker.

CHECKING THE PW BOARD

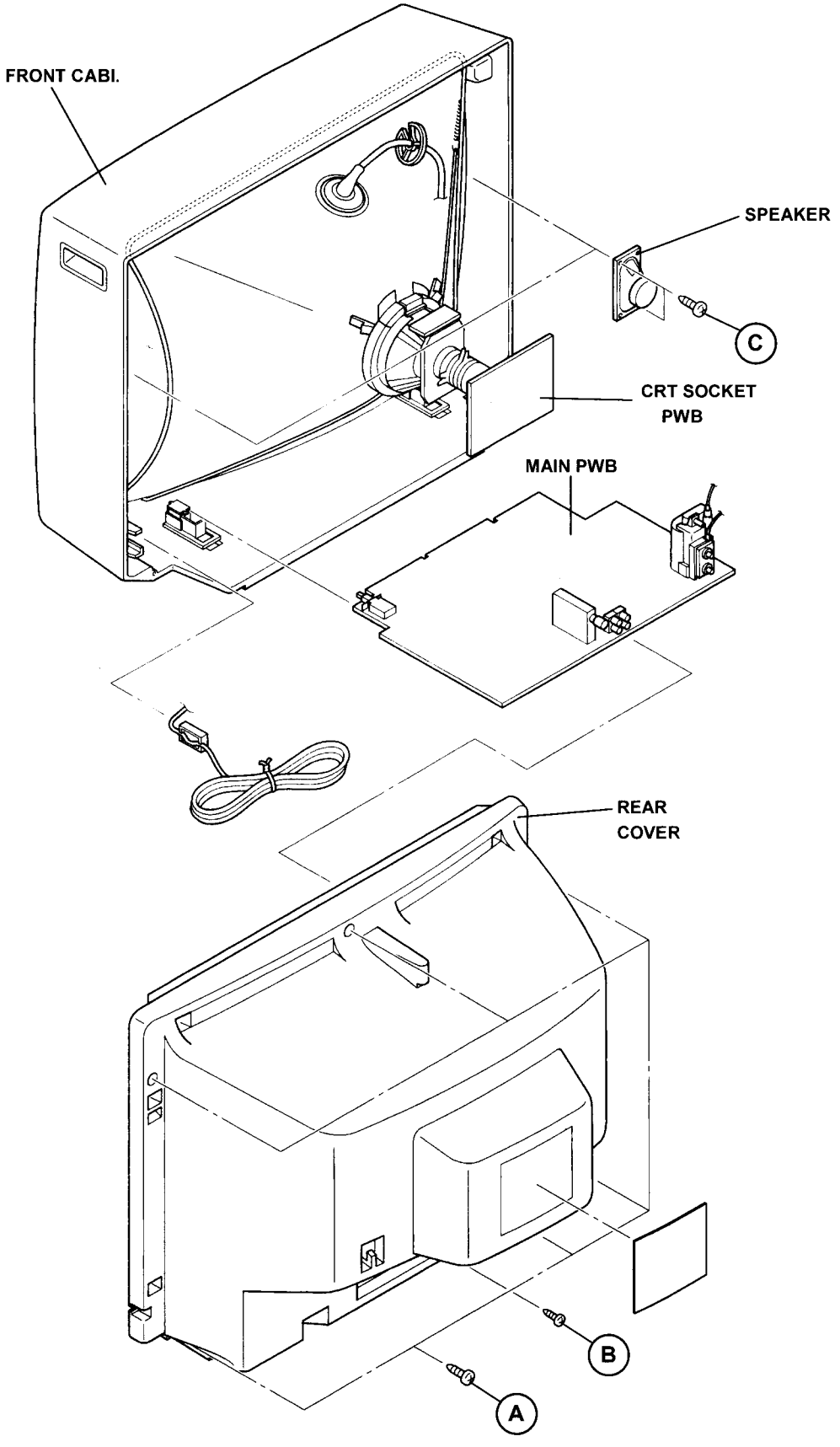
1. To check the back side of the PW Board.
   1) Pull out the PW Board. (Refer to REMOVING THE PW Board)
   2) Erect the PW Board vertically so that you can easily check the back side of the PW Board.

[CAUTION]

- When erecting the PW Board, be careful so that there will be no contacting with other PW Board.
- Before turning on power, make sure that the CRT earth wire and other connector are properly connected.

WIRE CLAMPING AND CABLE TYING

1. Be sure to clamp the wire.
2. Never remove the cable tie used for tying the wires together. Should it be inadvertently removed, be sure to tie the wires with a new cable tie.


FRONT CABI.
SPEAKER
C
CRT SOCKET
PWB
MAIN PWB
REAR
COVER
B
A

REPLACEMENT OF MEMORY ICs

1. MEMORY ICs

This TV uses memory ICs. In the memory ICs are memorized data for correctly operating the video and deflection circuits. When replacing memory ICs, be sure to use ICs written with the initial values of data.

2. PROCEDURE FOR REPLACING MEMORY ICs

(1) Power off

Switch the power off and unplug the power cord from the wall outlet.

(2) Replace ICs

Be sure to use memory ICs written with the initial data values.

(3) Power on

Plug the power cord into the wall outlet and switch the power on.

(4) Check and set SYSTEM CONSTANT SET:

1) Press the DISPLAY key and the PICTURE MODE key of the REMOTE CONTROL UNIT simultaneously.
2) The SERVICE MENU screen of Fig. 1 will be displayed.
3) While the SERVICE MENU on display, press the DISPLAY key and PICTURE MODE key simultaneously, and the SYSTEM CONSTANT SET screen of Fig. 2 will be displayed
4) Check the setting value of the SYSTEM CONSTANT SET of Table 1. If the value is different, select the setting item with the MENU ▽/△ key, and set the correct value with the MENU - / + key.
5) Press the DISPLAY key twice, and return to the normal screen.

(5) Receive channel of setting

Refer to the **OPERATING INSTRUCTIONS** and set the receive channels (channels preset) as described

(6) User Setting

Check the user setting value of Table 2, and if setting value is different, set the correct value.
For setting, refer to the **OPERATING INSTRUCTIONS**.

(7) Setting of SERVICE MENU

Verify the setting items of the SERVICE MENU of Table 3, and reset where necessary.
For setting, refer to the **SERVICE ADJUSTMENTS**.

SERVICE MENU

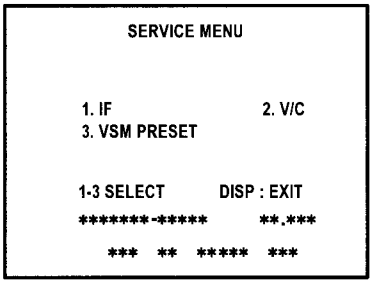
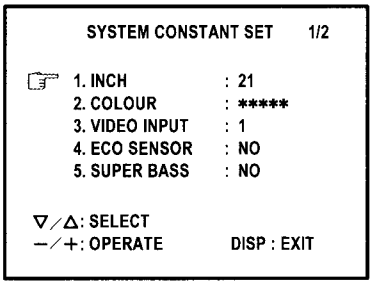


Fig. 1

SYSTEM CONSTANT- I



SYSTEM CONSTANT- II

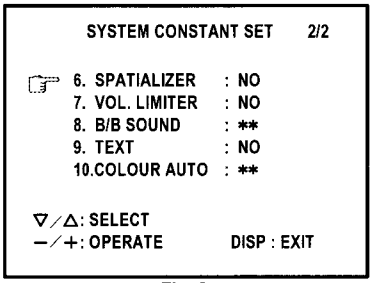
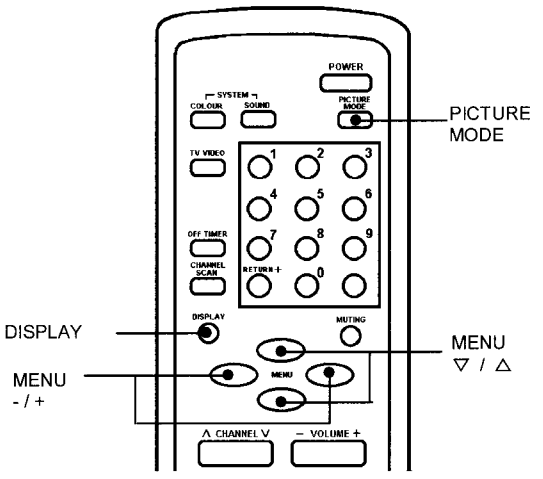


Fig. 2

NAME OF REMOTE CONTROL KEY



SETTING OF SYSTEM CONSTANT SET

Setting item	Setting contents	Setting value			
		AV-K21M2(L) AV-K21M2(L)-HK AV-K21M2(LB)	AV-K21M2(L)-A	AV-K21T2(L) AV-2131EE(L) AV-K21T2(LB)	AV-K21T2(L)-A
1. INCH	→ 14 → 21 → 25 → 29 →	21	←	←	←
2. COLOUR	→ MULTI. → TRIPLE → PAL →	MULTI	←	TRIPLE	←
3. VIDEO INPUT	→ 1 → 3 →	1	←	←	←
4. ECO SENSOR	→ YES → NO →	NO	←	←	←
5. SUPER BASS	→ YES → NO →	NO	←	←	←
6. SPATIALIZER	→ YES → NO →	NO	←	←	←
7. VOL. LIMITER	→ YES → NO →	NO	←	←	←
8. B/B SOUND	→ YES → NO →	NO	YES	NO	YES
9. TEXT	→ YES → NO →	NO	←	←	←
10. COLOUR AUTO	→ YES → NO →	NO	YES	NO	YES

Table 1

USER SETTING VALUES

Setting item	Setting value	Setting item	Setting value
SUB POWER	ON	ON SCREEN DISPLAY	POSITION NUMBER DISPLAY
CHANNEL POSITION	1 POSITION	SOUND SYSTEM	B/G
CHANNEL PRESET	See to OPERATING INSTRUCTION	PICTURE MODE (VSM)	BRIGHT
VOLUME	Appropriate sound volume	TV/VIDEO	TV
COLOUR SYSTEM	AUTO PAL	AUTO SHUTOFF	OFF
LANGUAGE	ENGLISH	VNR	OFF
BLUE BACK	OFF	ON TIMER	PR1 0:00

Table 2

SERVICE MENU SETTING ITEMS

Service menu	Setting item	Service menu	Setting item	
1. IF	1. VCO 2. DELAY POINT	**2. V / C**	1. CUT OFF (R / G / B) 2. DRIVE (R / B) 3. BRIGHT 4. CONT. 5. COLOUR (P / S / N) 6. TINT (N3 / N4) 7. BLACK OFFSET (R-Y / B-Y)	8. SHARP (TV/VIDEO) 9. TEXT(R/G/B) CONT. 10. H. CENTER 11. V. HEIGHT 12. V. LIN. 13. V. S-CR 14. V. CENTER (Fixed)
3. VSM PRESET (BRIGHT/STD/SOFT)	TINT COLOUR BRIGHT CONT. SHARP			

Table 3

Do not adjust

3. BASIC OPERATION OF SERVICE MENU

(1) How to enter SERVICE MENU

Press the DISPLAY key and the PICTURE MODE key of the REMOTE CONTROL UNIT simultaneously.
The SERVICE MENU screen of Fig. 1 will be displayed.

SERVICE MENU

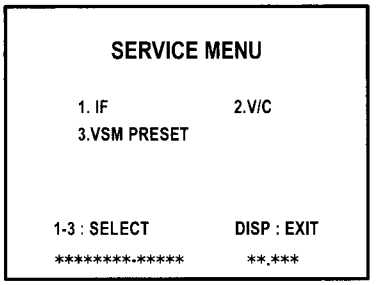


Fig. 1

(2) Selection of SUB MENU SCREEN

Press one of the keys 1 ~ 3 of the REMOTE CONTROL UNIT,
and select the SUB MENU SCREEN (See Fig.2) from the SERVICE MENU.
SERVICE MENU → SUB MENU **1. IF**
2. V / C
3. VSM PRESET

SUB MENU SCREEN

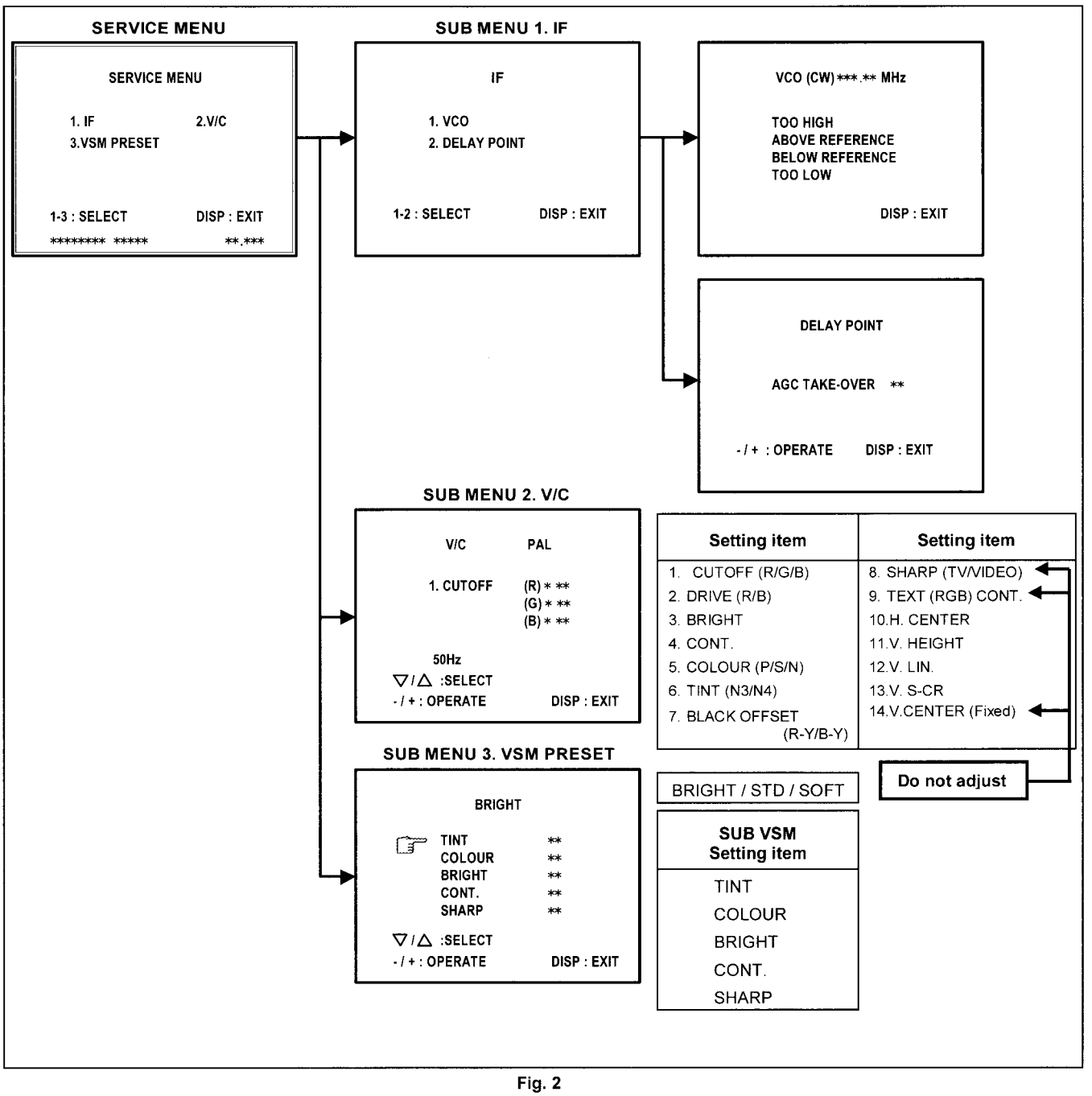


Fig. 2

(3) Method of Setting

* Once the setting values are set, they are memorized automatically.
* It must not adjust without signal.

1) **1. IF**

[1. VCO]

① 1 Key ····· Select **1. IF**.
② 1 Key ····· Select 1. VCO. (CW)
③ The VCO(CW) screen will be displayed in yellow when the AFC voltage is at a certain level and in blue when it is at other levels.
④ DISPLAY Key ····· When this is pressed, you will return to the **SERVICE MENU**.

[2. DELAY POINT]

① 1 Key ····· Select **1. IF**.
② 2 Key ····· Select 2. DELAY POINT.
③ MENU - / + Key ····· Set (adjust) the setting values of the setting items.
④ DISPLAY Key ····· When this is pressed twice, you will return to the **SERVICE MENU**.

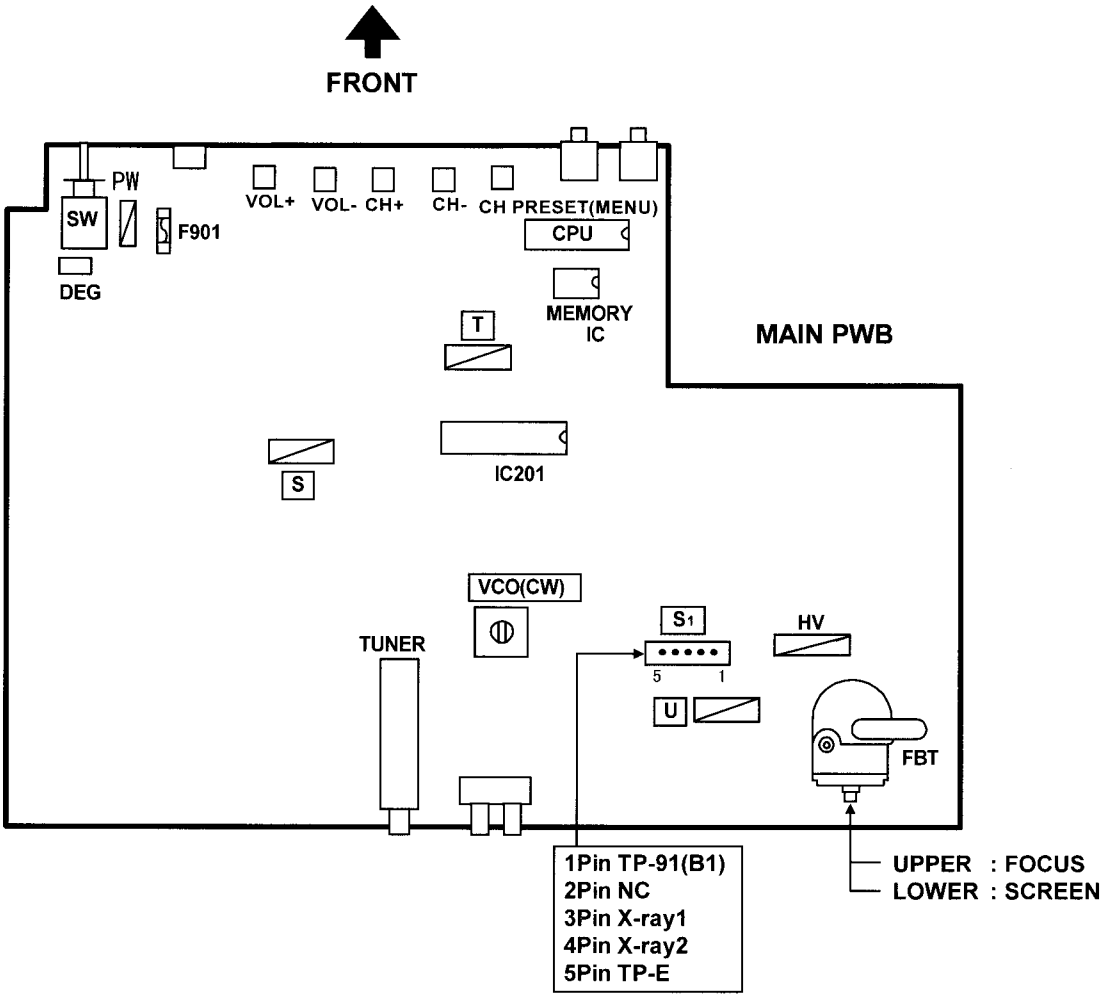
2) **2. V/C and 3. VSM PRESET**

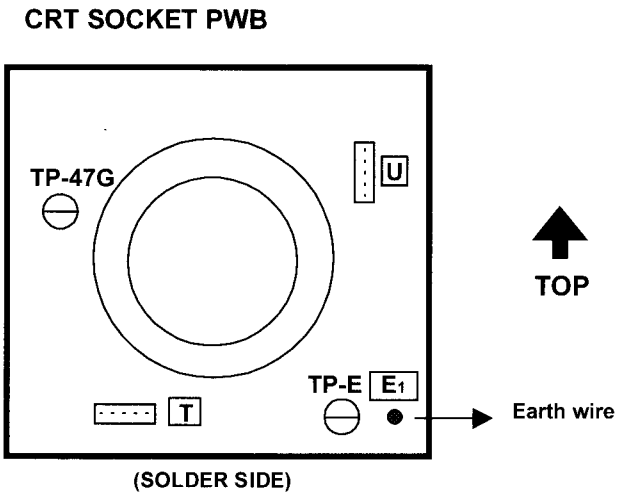
① 2 and 3 Keys ····· Select one from **2. V/C and 3. VSM PRESET**
② MENU ▽ / △ key ····· Select setting items.
③ MENU - / + Key ····· Set (adjust) the setting values of the setting items.
(Use the number keys of the REMOTE CONTROL UNIT for setting of WHITE BALANCE and BLACK OFFSET. For the setting, refer to each item concerned.)
④ DISPLAY Key ····· When this is pressed, you will return to the **SERVICE MENU**.

(4) Release of SERVICE MENU

After completing the setting, return to the SERVICE MENU, then again press the DISPLAY key.

ADJUSTMENT LOCATIONS





ADJUSTMENTS

B1 POWER SUPPLY

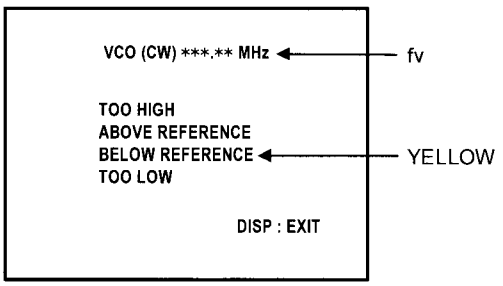
Item	Measuring instrument	Test point	Adjustment part	Description
Check of B1 Power Supply	Signal generator DC Volt-meter	TP-91 (B1) TP-E (⏚)		1. Receive a whole black signal. 2. Connect a DC voltmeter to TP-91(B1) and TP-E (⏚). 3. Make sure that the voltage is DC114.5±1.0V.

FOCUS ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of FOCUS	Signal generator		FOCUS VR [In FBT]	1. Receive a cross-hatch signal. 2. While watching the screen, adjust the FOCUS VR to make the vertical and horizontal lines as fine and sharp as possible. 3. Make sure that when the screen is darkened, the lines remain in good focus.

IF CIRCUIT ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of VCO(CW)	Remote control unit		VCO(CW) TRANSF.	● **Under normal conditions, no adjust is required.** 1. Select 1. IF from the SERVICE MENU. 2. Press the **1** key and select 1. VCO. 3. Select a receivable broadcast channel with the CHANNEL key. 4. Turn the core of VCO(CW) TRANSF. Unit the colour of the characters TOO HIGH displayed on the screen changes from blue to **yellow**. (Step 1) 5. Then slowly turn the core of VCO(CW) TRANSF to the **left** until the colour of the characters BELOW REFERENCE changes from blue to **yellow**. (Step 3) 6. Press the display key three times to return to normal screen. 7. Perform CHANNEL PRESET again, and make sure that each broadcast is being received properly.



Screen display	Step 1	→ 2	→ 3
TOO HIGH	**Yellow**	→ Blue	→ Blue
ABOVE REFERENCE	Blue	→ **Yellow**	→ Blue
BELOW REFERENCE	Blue	→ Blue	→ **Yellow**
TOO LOW	Blue	→	Blue

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of DELAY POINT (AGC)	**Remote control unit**		**DELAY POINT (AGC TAKE-OVER)**	1. Receive a black and white signal (colour off). 2. Select **1. IF** from the SERVICE MENU. 3. Select **2. DELAY POINT** by pressing the **2** key on the remote control. 4. Adjust the MENU - or + key until video noise disappears. 5. Turn to other channels and make sure that there are no irregularities.

Setting (adjustment) item	Variable range	Initial setting value
DELAY POINT (AGC TAKE-OVER)	0～63	20

V / C CIRCUIT ADJUSTMENT (With DEF. Adjustment)

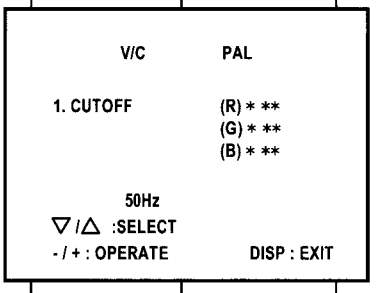
- There are 2 modes of adjustment (initial setting value) —— 50Hz mode and 60Hz mode —— depending upon the kind of signals (vertical frequency 50Hz / 60Hz).
- When adjusted in 50Hz mode, 60Hz mode will be automatically set.

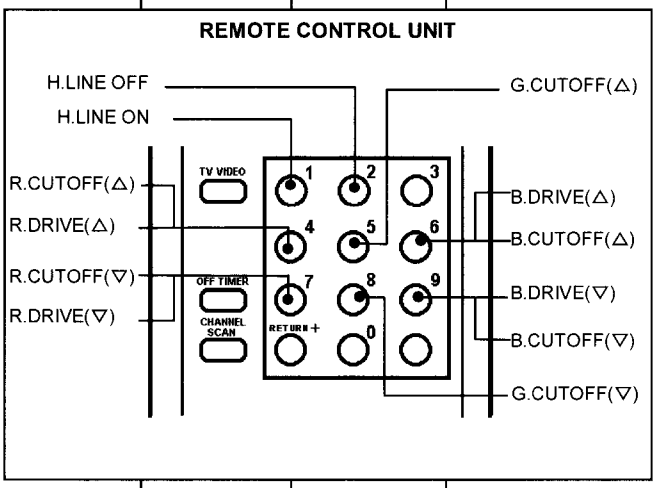
The setting (adjustment) using the REMOTE CONTROL UNIT is made on the basis of the initial setting values.
The setting values which adjust the screen to the optimum condition can be different from the initial setting values.

Setting item \ Colour system		Variable range	Initial setting value							
			PAL		SECAM		NTSC 3.58		NTSC 4.43	
1. CUT OFF (R / G / B)		-128～+127	+00		←		←		←	
2. DRIVE (R / B)		-128～+127	+00		←		←		←	
3. BRIGHT		-64～+64	-20		←		←		←	
4. CONT.		-58～+28	-03		←		←		←	
5. COLOUR		-60～+67	+07		+11		+12		-02	
6. TINT	TV / VIDEO	-48～+79	——		——		+20 / +08		-04 / +00	
7. BLACK OFFSET (R-Y / B-Y)		-8～+7	+03 / -06		←		←		←	
8. SHARP (Do Not Adj.)	TV / VIDEO	-32～+31	-08 / +02 (Fixed)		←		←		←	
9. TEXT (RGB) CONT. (Do Not Adj.)		-128～+47	+15 (Fixed)		←		←		←	
			50Hz	**60Hz**	**50Hz**	**60Hz**	**50Hz**	**60Hz**	**50Hz**	**60Hz**
10. H. CENTER		-16～+15	-06	-01	←	←	←	←	←	←
11. V. HEIGHT		-64～+63	+02	+00	←	←	←	←	←	←
12. V. LIN		-16～+15	+00	+00	←	←	←	←	←	←
13. V. S-CR		-64～+63	+00	+00	←	←	←	←	←	←
14. V. CENTER		0～+127	+00 (Fixed)	+00 (Fixed)	←	←	←	←	←	←

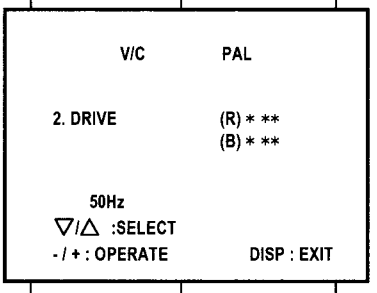
<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment part</th><th>Description</th></tr>
<tr><td>Adjustment of WHITE BALANCE (Low light)</td><td>● Signal generator
● Remote control unit</td><td></td><td>1. CUT OFF (R)
CUT OFF (G)
CUT OFF (B)

SCREEN VR (IN FBT)</td><td>1. Receive a black and white signal (colour off).
2. From the SERVICE MENU, selct 2. V/C.
3. Select 1. CUT OFF (R), (G) and (B) with MENU ▽/△ key, and set each value to initial setting value with 4～9 keys of the remote control unit.
4. Press the 1 key of the remote control unit to produce a single horizontal line.
5. Turn the SCREEN VR fully counter-clockwise, then slowly turn it clockwise to where a red, blue and green colour is faintly visible.
6. Use keys 4～9 of the remote control unit and adjust the other 2 colours to where the single horizontal line appears white.
7. Turn the SCREEN VR to where the single horizontal line glows faintly.
8. Press the 2 key to return to 1. CUT OFF screen.
9. Press the DISPLAY key twice to return to the normal screen.

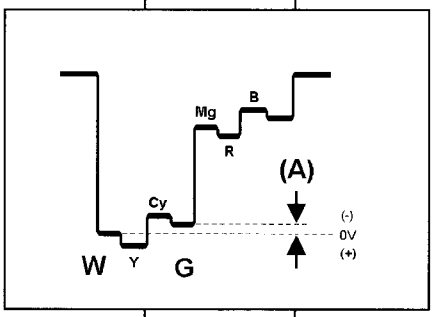


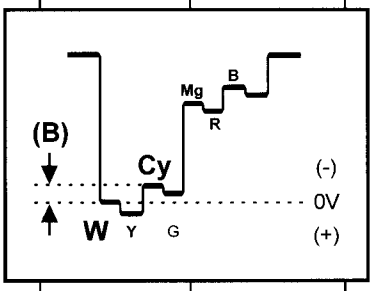
<table>
<tr><th colspan="2">Setting (Adjustment) item</th><th>Variable range</th><th>Initial setting value</th></tr>
<tr><td rowspan="3">1. CUT OFF</td><td>R</td><td>-128～+127</td><td>+00</td></tr>
<tr><td>G</td><td>-128～+127</td><td>+00</td></tr>
<tr><td>B</td><td>-128～+127</td><td>+00</td></tr>
</table></td></tr>
<tr><td>Adjustment of WHITE BALANCE (High light)</td><td>● Signal generator
● Remote control unit</td><td></td><td>2. DRIVE (R)
DRIVE (B)</td><td>1. Receive a black and white signal (colour off).
2. From the SERVICE MENU, selct 2. V/C.
3. Select 2. DRIVE (R) / (B) with MENU ▽/△key, and set each value to initial setting value with 4 and 7 or 6 and 9 keys of the remote control unit.
4. Use the keys 4 and 7 or 6 and 9 to produce a white screen
5. Press the DISPLAY key twice to return to the nomal screen.

<table>
<tr><th colspan="2">Setting (Adjustment) item</th><th>Variable range</th><th>Initial setting value</th></tr>
<tr><td rowspan="2">2. DRIVE</td><td>R</td><td>-128～+127</td><td>+00</td></tr>
<tr><td>B</td><td>-128～+127</td><td>+00</td></tr>
</table></td></tr>
</table>

Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of SUB BRIGHT	● **Remote control unit**		**3. BRIGHT**	1. Receive any broadcast. 2. Select **2. V/C** from SERVICE MENU. 3. Select **3. BRIGHT** with the MENU ▽/△ key. 4. Set the initial setting value with the MENU - or + key. 5. If the brightness is not the best with the initial set value, make fine adjustment until you get the best brightness.
Adjustment of SUB CONT.	● **Remote control unit**		**4. CONT.**	1. Receive any broadcast. 2. Select **2. V/C** from SERVICE MENU. 3. Select **4. CONT.** with the MENU ▽/△ key. 4. Set the initial setting value with the MENU - or + key. 5. If the contrast is not the best with the initial set value, make fine adjustment until you get the best contrast.
Adjustment of SUB COLOUR I	● **Remote control unit**		**5. COLOUR**	**[Method of adjustment without measuring instrument]**
			PAL COLOUR	**(PAL COLOUR)** 1. Receive a PAL broadcast. 2. Select **2. V/C** from the SERVICE MENU. 3. Select **5. COLOUR** with the MENU ▽/△ key. 4. Set the initial setting value for PAL COLOUR with the MENU - or + key. 5. If the colour is not the best with the initial set value, make fine adjustment until you get the best colour.
			SECAM COLOUR	**(SECAM COLOUR)** 1. Receive a SECAM broadcast. 2. Make fine adjustment of SECAM COLOUR as previously.
			NTSC 3.58 COLOUR	**(NTSC 3.58 COLOUR)** 1. Receive a NTSC 3.58MHz broadcast. 2. Make similar fine adjustment of NTSC 3.58 COLOUR as previously.
				(NTSC 4.43 COLOUR) When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.

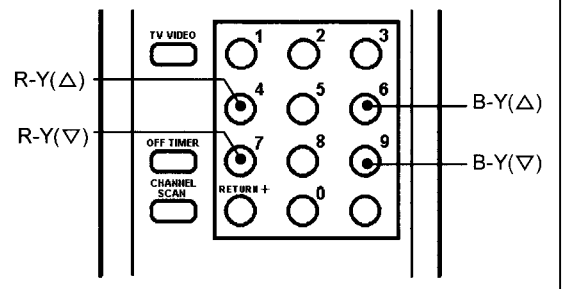
<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment part</th><th>Description</th></tr>
<tr><td rowspan="4">Adjustment of SUB COLOUR Ⅱ
 
</td><td rowspan="4">● Signal generator
● Oscillo-scope
● Remote control unit</td><td rowspan="4">TP-47G
TP-E (⏚)
[CRT SOCKET PWB]</td><td>5. COLOUR</td><td>[Method of adjustment using measuring instrument]</td></tr>
<tr><td>PAL COLOUR</td><td>(PAL COLOUR)
1. Receive a PAL full field colour bar signal (75% white).
2. Select 2. V/C from SERVICE MENU.
3. Select 5. COLOUR with the MENU ▽/△ key.
4. Set the initial setting value of PAL COLOUR with the MENU - or + key.
5. Connect the oscilloscope between TP-47G and TP-E.
6. Adjust PAL COLOUR to bring the value of (A) in the illustration to the values as shown given below.
<table><tr><th>MODEL No.</th><th>Voltage (W&G)</th></tr><tr><td>AV-K21M2(LB)
AV-K21T2(LB)</td><td>+6V</td></tr><tr><td>Other models</td><td>+4V</td></tr></table></td></tr>
<tr><td>SECAM COLOUR</td><td>(SECAM COLOUR)
1. Receive a SECAM full field colour bar signal (75% white).
2. Set the initial setting value of SECAM COLOUR with the MENU - or + key.
3. Adjust SECAM COLOUR to bring the value of (A) in the illustration to +3V (W & G).</td></tr>
<tr><td>NTSC 3.58 COLOUR</td><td>(NTSC 3.58 COLOUR)
1. Receive a NTSC 3.58 full field colour bar signal (75% white).
2. Set the initial setting value of NTSC 3.58 COLOUR with the MENU - or + key.
3. Adjust NTSC 3.58 COLOUR to bring the value of (A) in the illustration to the values as shown given below.
<table><tr><th>MODEL No.</th><th>Voltage (W&G)</th></tr><tr><td>AV-K21M2(L)
AV-K21M2(L)-HK
AV-K21M2(L)-A</td><td>+8V</td></tr><tr><td>AV-K21M2(LB)
AV-K21T2(L)
AV-K21T2(L)-A
AV-2131EE</td><td>+7V</td></tr><tr><td>AV-K21T2(LB)</td><td>+5V</td></tr></table></td></tr>
<tr><td></td><td>(NTSC 4.43 COLOUR)
When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.</td></tr>
</table>

<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment part</th><th>Description</th></tr>
<tr><td rowspan="3">Adjustment of TINT I</td><td rowspan="3">● Remote control unit</td><td rowspan="3"></td><td>6. TINT</td><td>[Method of adjustment without measuring instrument]</td></tr>
<tr><td>NTSC 3.58 TINT</td><td>(NTSC 3.58 TINT)
1. Receive a NTSC 3.58 colour bar signal (full field colour bar 75% white).
2. Select 2. V/C from SERVICE MENU.
3. Select 6. TINT with the MENU ▽/△ key.
4. Set the initial setting value of NTSC 3.58 with the MENU - or + key.
5. If you cannot get the best tint with the initial setting value, make fine adjustment until you get the best tint.</td></tr>
<tr><td></td><td>(NTSC 4.43 COLOUR)
When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.</td></tr>
<tr><td rowspan="3">Adjustment of TINT II</td><td rowspan="3">● Signal generator
● Oscillo-scope
● Remote control unit</td><td rowspan="3">TP-47G
TP-E (⏚)
[CRT SOCKET PWB]</td><td>6. TINT</td><td>[Method of adjustment using measuring instrument]</td></tr>
<tr><td>NTSC 3.58 TINT</td><td>(NTSC 3.58 TINT)
1. Receive a NTSC 3.58 colour bar signal (full field colour bar 75% white).
2. Select 2. V/C from SERVICE MENU.
3. Select 6. TINT with the MENU ▽/△ key.
4. Set the initial setting value of NTSC 3.58 with the MENU - or + key.
5. Connect the oscilloscope between TP-47G and TP-E.
6. Adjust NTSC 3.58 TINT to bring the value of (B) in the illustration to the values as shown given below.
 

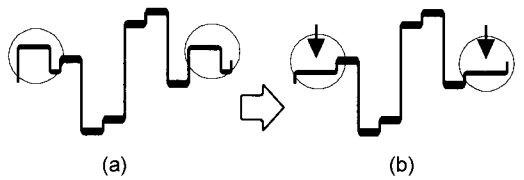
<table>
<tr><th>MODEL No.</th><th>Voltage (W&Cy)</th></tr>
<tr><td>AV-K21M2(LB)
AV-K21T2(LB)</td><td>+7V</td></tr>
<tr><td>Other models</td><td>+8V</td></tr>
</table></td></tr>
<tr><td></td><td>(NTSC 4.43 TINT)
When NTSC 3.58 is set, NTSC 4.43 will be automatically set at the respective values.</td></tr>
</table>

<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment part</th><th>Description</th></tr>
<tr><td>Adjustment of BLACK OFFSET- I (SECAM)</td><td>● Remote control unit</td><td></td><td>7. BLACK OFFSET
(R-Y)
(B-Y)</td><td>[Method of adjustment without measuring instrument]
1. Receive a SECAM broadcast.
2. Select 2. V/C from SERVICE MENU.
3. Select 7. BLACK OFFSET with the MENU ▽/△ key.
4. Set the initial setting value for BLACK OFFSET (R-Y) and (B-Y) with 4 and 7 or 6 and 9 keys of the remote control.
5. If the picture is not the best with the initial setting value, make fine adjustment until you get the best picture.
6. Press the DISPLAY key twice to return to the normal screen.</td></tr>
<tr><td>Adjustment of BLACK OFFSET- II (SECAM)</td><td>● Signal generator
● Oscillo-scope
● Remote control unit</td><td>35 PIN (R-Y)
36 PIN (B-Y)
IC 201 OF MAIN PWB</td><td>7. BLACK OFFSET
(R-Y)
(B-Y)</td><td>[Method of adjustment using measuring instrument]
1. Receive a SECAM COLOUR bar signal (full field colour bar 75% white).
2. Select 2. V/C from SERVICE MENU.
3. Select 7. BLACK OFFSET with the ▽/△ key.
4. Connect the oscilloscope between 35 pin of IC 201 and TP-E.
5. By using 4 and 7 keys of the remote control, adjust the BLACK OFFSET (R-Y) so that it becomes the waveform changes from (a) to (b) shown in the figure.
6. Connect the oscilloscope between 36 pin of IC 201 and TP-E.
7. By using 6 and 9 keys of the remote control, adjust the BLACK OFFSET (B-Y) so that it becomes the waveform changes from (c) to (d) shown in the figure.
8. If the picture is not the best with the adjusted picture, make fine adjustment until you get the best picture.
9. Press the DISPLAY key twice to return to the normal screen.</td></tr>
</table>

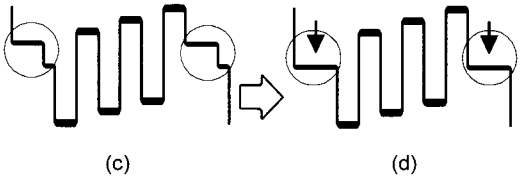
REMOTE CONTROL UNIT



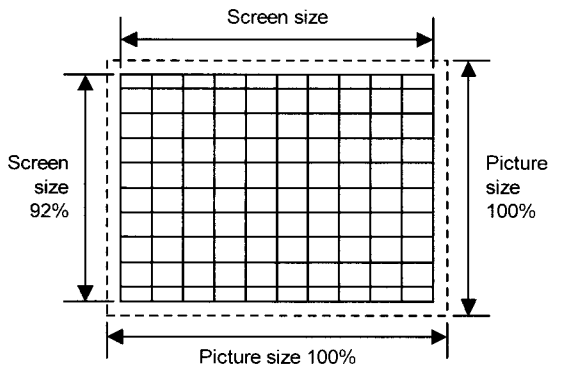
[R-Y]

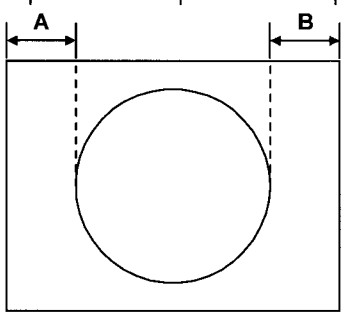


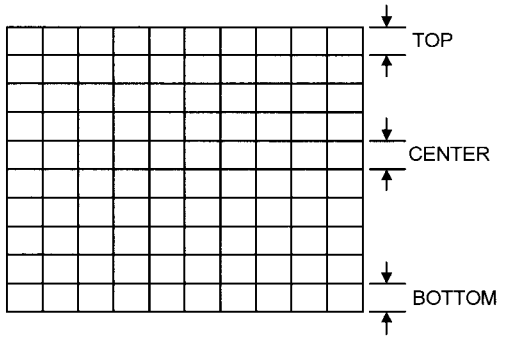
[B-Y]



Item	Measuring instrument	Test point	Adjustment part	Description
Adjustment of V. HEIGHT	• **Signal generator** • **Remote control unit**		**11. V. HEIGHT** **V. CENTER SW (S1401)**	**[fv : 50Hz Mde]** 1. Receive a cross-hatch signal. 2. Select **2. V/C** from SERVICE MENU. 3. Select the **V. CENTER SW** and switch it to be equal top and bottom. 4. Select **11. V. HEIGHT** with the MENU ▽/△ key. 5. Set the initial setting value with the MENU - / + key. 6. Adjust V. HEIGHT and make the vertical screen size 92% of the picture size with the MENU + / - keys of remote control unit.
Adjustment of H. CENTER			**10. H. CENTER**	7. Receive a circle pattern signal. 8. Select 10. H. CENTER with the MENU ▽/△ key. 9. Set the initial setting value of 10. H. CENTER with the MENU - / + key. 10. Adjust 10. H. CENTER to make A=B with the MENU - / + key.
Adjustment of V. LIN. & V.S-CR			**12. V. LIN.** **13. V.S-CR**	• **When the vertical linearity has been deteriorated remarkably perform the following steps.** 11. Receive a cross-hatch signal. 12. Select **12. V. LIN.** with the MENU ▽/△ key. 13. Set the initial setting value of **12. V. LIN.** with the MENU - / + key. 14. Select **13. V.S-CR** with the MENU ▽/△ key. 15. Set the initial setting value of **13. V.S-CR** with the MENU - / + key. 16. Adjust **12. V. LIN.** and **13. V.S-CR** so that the spaces of each line on **TOP**, **CENTER** and **BOTTOM** become uniform.
				17. Make sure that the adjustment is properly done on the screen of 60Hz mode. **[NOTE]** • Adjust to make both 50Hz & 60Hz are the same V.SIZE and fine straight line. • When adjust again, adjust 50Hz mode first. • When adjust in 60Hz mode, only 60Hz mode is adjust.

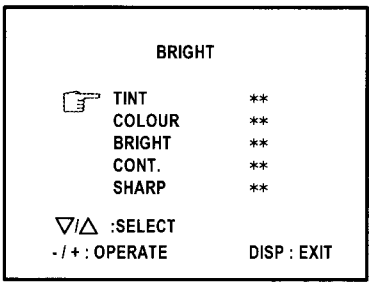






VSM ADJUSTMENT

Item	Measuring instrument	Test point	Adjustment part	Description
Setting of VSM PRESET	● Remote control unit		**TINT** **COLOUR** **BRIGHT** **CONT.** **SHARP**	(VSM PRESET) 1. Select **3. VSM PRESET** from the SERVICE MENU. 2. Select BRIGHT with the PICTURE MODE key. 3. Adjust the MENU ▽/△ and MENU - or + key to bring the set values of **TINT** ~ **SHARP** to the values shown in the table. 4. Respectively select the VSM PRESET mode for SOFT and STANDARD, and make similar adjustment as in 3 above.



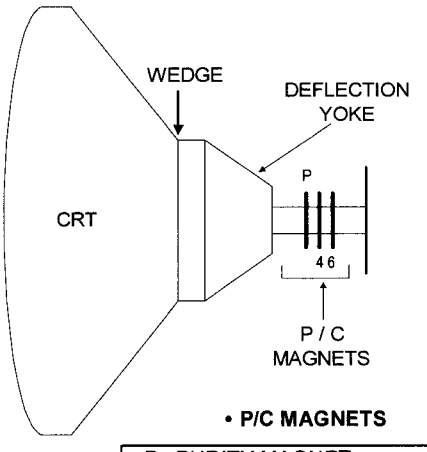
VSM preset mode / VSM Setting item	BRIGHT	STANDARD	SOFT
TINT SETTING VALUE	15	←	←
COLOUR SETTING VALUE	15	←	←
BRIGHT SETTING VALUE	15	←	←
CONT. SETTING VALUE	30	19	11
SHARP SETTING VALUE	15	←	12

SETTING VALUE OF VSM PRESET

PURITY, CONVERGENCE

PURITY ADJUSTMENT

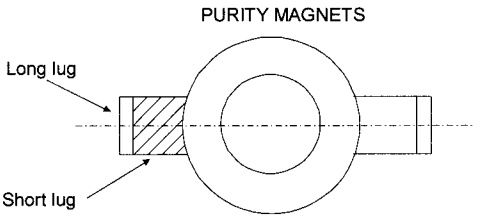
1. Demagnetize CRT with the demagnetizer.
2. Loosen the retainer screw of the deflection yoke.
3. Remove the wedges.
4. Input a green raster signal from the signal generator, and turn the screen to green raster.
5. Move the deflection yoke backward.
6. Bring the long lug of the purity magnets on the short lug and position them horizontally. (Fig.2)
7. Adjust the gap between two lugs so that the GREEN RASTER will come into the center of the screen. (Fig.3)
8. Move the deflection yoke forward, and fix the position of the deflection yoke so that the whole screen will become green.
9. Insert the wedge to the top side of the deflection yoke so that it will not move.
10. Input a crosshatch signal.
11. Verify that the screen is horizontal.
12. Input red and blue raster signals, and make sure that purity is properly adjusted.



• P/C MAGNETS

P : PURITY MAGNET
4 : 4 POLES (convergence magnets)
6 : 6 POLES (convergence magnets)

Fig.1



Bring the long lug over the short lug and position them horizontally.

Fig.2

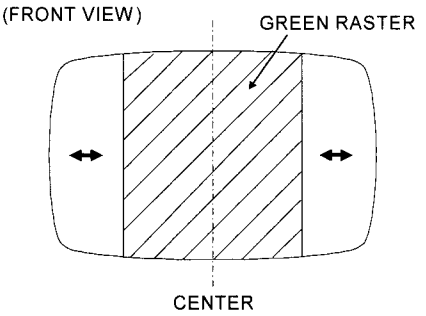


Fig.3

STATIC CONVERGENCE ADJUSTMENT

1. Input a crosshatch signal.
2. Using 4-pole convergence magnets, overlap the red and blue lines in the center of the screen (Fig.1) and turn them to magenta (red/blue).
3. Using 6-pole convergence magnets, overlap the magenta(red/blue) and green lines in the center of the screen and turn them to white.
4. Repeat 2 and 3 above, and make best convergence.

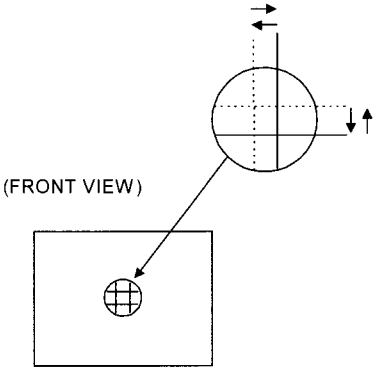


Fig.1

DYNAMIC CONVERGENCE ADJUSTMENT

1. Move the deflection yoke up and down and overlap the lines in the periphery. (Fig. 2)
2. Move the deflection yoke left to right and overlap the lines in the periphery. (Fig. 3)
3. Repeat 1 and 2 above, and make best convergence.

(FRONT VIEW)

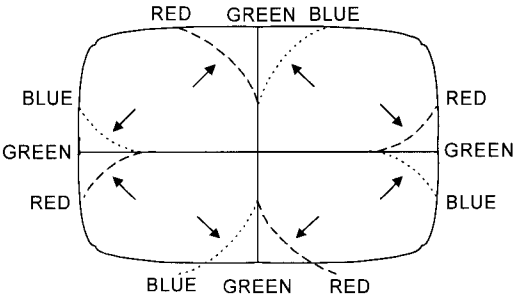


Fig.2

- After adjustment, fix the wedge at the original position.
  Fasten the retainer screw of the deflection yoke.
  Fix the 6 magnets with glue.

(FRONT VIEW)

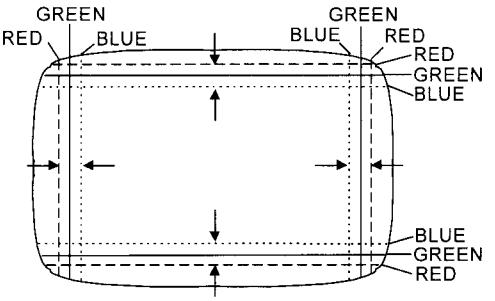


Fig.3

SELF CHECK FUNCTIONS

1. Outline

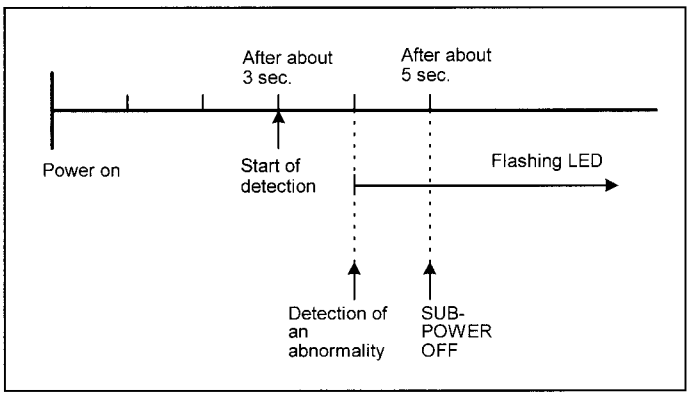
This model has self check functions given below. When an abnormality has been detected, the SUB POWER is turned off and the LED flashes to inform of the failure. An abnormality is detected by the signal input state of the control line connected to the microcomputer.

2. Self check items

Check item	Details of detection	Method of detection	State of abnormality
Over-current protection	An over-current on the LOW B line is detected.	The main microcomputer detects the possible abnormality at 30-msec. intervals and judges the results in every 16 time. Of the 16 times, if NG is detected more than 9 times, it is judged that there is an abnormality	When an abnormality has been detected, the SUB-POWER is turned off. While the SUB-POWER is being turned off, the power key of the remote controller is not operational until the power code is taken out and put in again.
CRT NECK protection	Operation of Vertical deflection circuit.	DITTO	DITTO
X-ray protection	Operation of X-ray protection circuit	DITTO	DITTO

3. Self check indicating function

At about 3 seconds after the power is turned on, the self-check function starts.
In the case where an abnormality has been detected within the subsequent 2 seconds, the LED flashes, but the SUB-POWER is not turned off.
When an abnormality has been detected at about 5 seconds after the power is turned on, the SUB POWER is turned off immediately and the LED flashes.



[Indication by LED]

Item	LED flashing intervals	Priority of detection
① Over-current protection	At 0.25-second intervals	1
② CRT NECK protection / X-ray protection	At 0.5-second intervals	2

Note : In case of ① + ②, the item ① is indicated

[NOTE]

X-RAY : There are two different types of models with and without X-RAY PROTECTION.

LED : There are two kinds of LEDs — ON TIMER LED and ECO LED. In the models equipped with ON TIMER LED and ECO LED, both LEDs flash (turn on and off) simultaneously. In the models with one of the above LEDs, the LED flashes.

AV-K21M2(L)/AV-K21M2(L)-A/AV-K21M2(L)-HK/AV-K21M2(LB)
AV-K21T2(L)/AV-K21T2(L)-A/AV-2131EE(L)/AV-K21T2(LB)
STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1.SAFETY

The components identified by the⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal :PAL Colour bar signal
(2)Setting positions of each knob/button and variable resistor :Original setting position when shipped
(3)Internal resistance of tester :DC 20kΩ/V
(4)Oscilloscope sweeping time :H ⇒ 20μS/div
:V ⇒ 5mS/div
:Others ⇒ Sweeping time is specified
(5)Voltage values :All DC voltage values

∗ Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

●In the PW board :R1209→R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

●Resistance value

No unit	:[Ω]
K	:[KΩ]
M	:[MΩ]

●Rated allowable power

No indication	:1/4[W]
Others	:As specified

●Type

No indication	:Carbon resistor
OMR	:Oxide metal film resistor
MFR	:Metal film resistor
MPR	:Metal plate resistor
UNFR	:Uninflammable resistor
FR	:Fusible resistor

*Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

●Capacitance value

1 or higher	:[pF]
less than 1	:[μF]

●Withstand voltage

No indication	:DC50[V]
Others	:DC withstand voltage [V]
AC indicated	:AC withstand voltage [V]

*Electrolytic Capacitors
47/50[Example]:Capacitance value [μF]/withstand voltage[V]

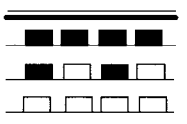
●Type

No indication	:Ceramic capacitor
MY	:Mylar capacitor
MM	:Metalized mylar capacitor
PP	:Polypropylene capacitor
MPP	:Metalized polypropylene capacitor
MF	:Metalized film capacitor
TF	:Thin film capacitor
BP	:Bipolar electrolytic capacitor
TAN	:Tantalum capacitor

(3)Coils

No unit	:[μH]
Others	:As specified

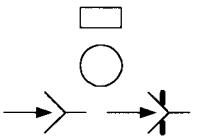
(4)Power Supply



*Respective voltage values are indicated

(5)Test point

(6)Connecting method



(7)Ground symbol

⊥ :LIVE side ground
⏚ :ISOLATED(NEUTRAL) side ground
⏚ :EARTH ground
▽ :DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⏚) side GND. Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

◇**Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.**

Sep. 1998 No.51447

CONTENTS

CIRCUIT DIAGRAMS

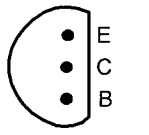
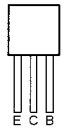
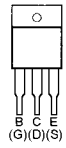
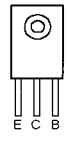
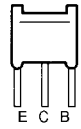
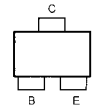
COLOUR SYSTEM	PWB No.	MODEL No.	PAGE
MULTI.	MAIN PWB SCL-1213A-H2	AV-K21M2(L)/AV-K21M2(L)-A AV-K21M2(L)-HK	P2-9～P2-14
↑	MAIN PWB SCL-1220A-H2	AV-K21M2(LB)	↑
TRIPLE	MAIN PWB SCL-1212A-H2	AV-K21T2(L)/AV-K21T2(L)-A AV-2131EE(L)	P2-15～P2-20
↑	MAIN PWB SCL-1221A-H2	AV-K21T2(LB)	↑

PATTERN DIAGRAMS

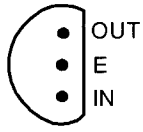
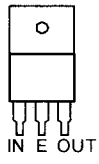
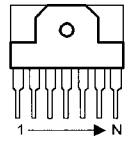
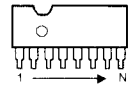
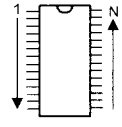
ALL MODEL PATTERN	PWB No.	PATTERN No.	PAGE
COMMON	MAIN PWB	CKF0708-CH2-1	P2-21～P2-22
↑	CRT SOCKET PWB (Within MAIN PWB)	↑	P2-23

SEMICONDUCTOR SHAPES

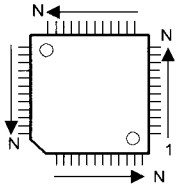
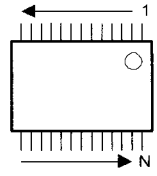
TRANSISTOR

BOTTOM VIEW	FRONT VIEW				TOP VIEW
					CHIP TR 

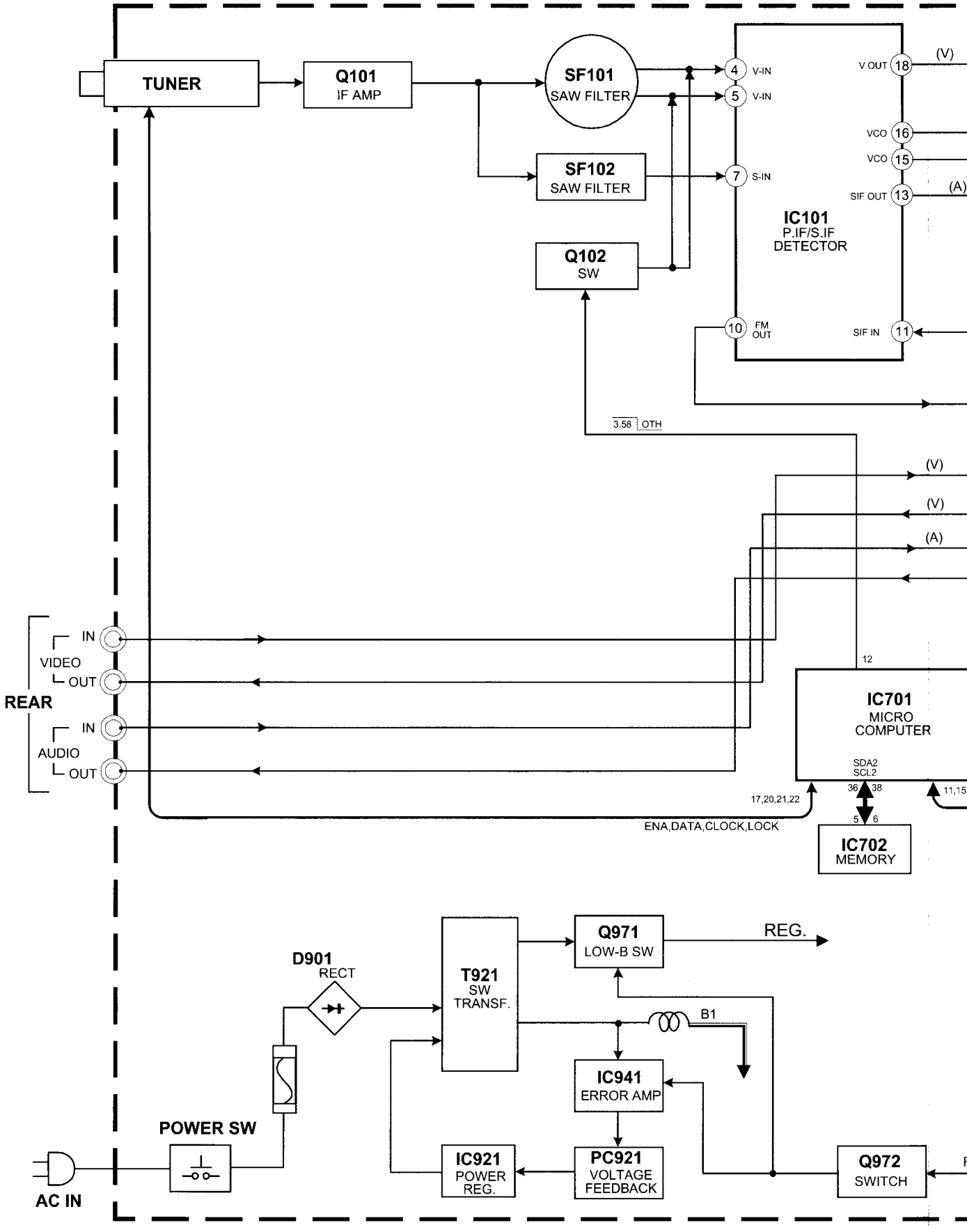
IC

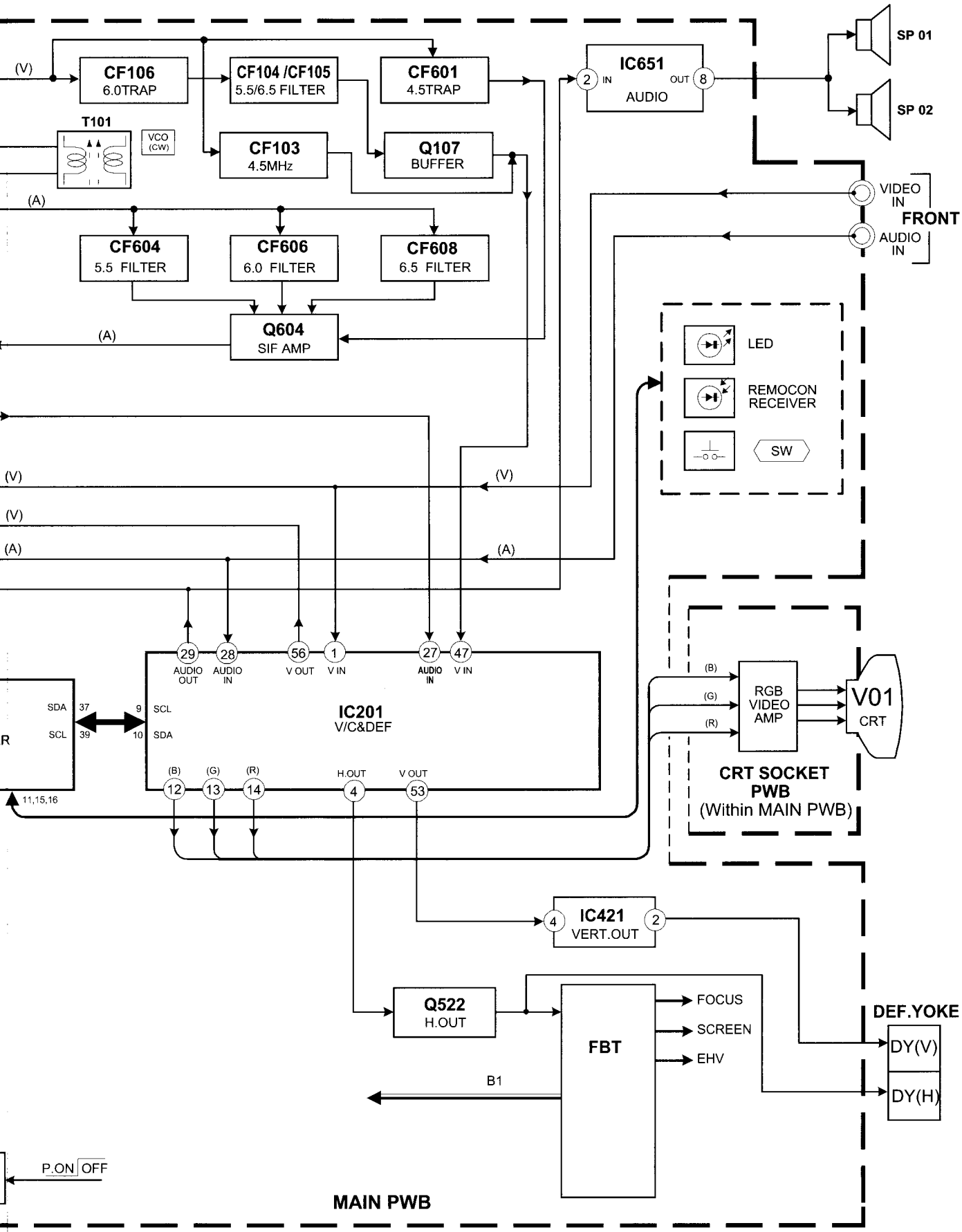
BOTTOM VIEW	FRONT VIEW			TOP VIEW
				

CHIP IC

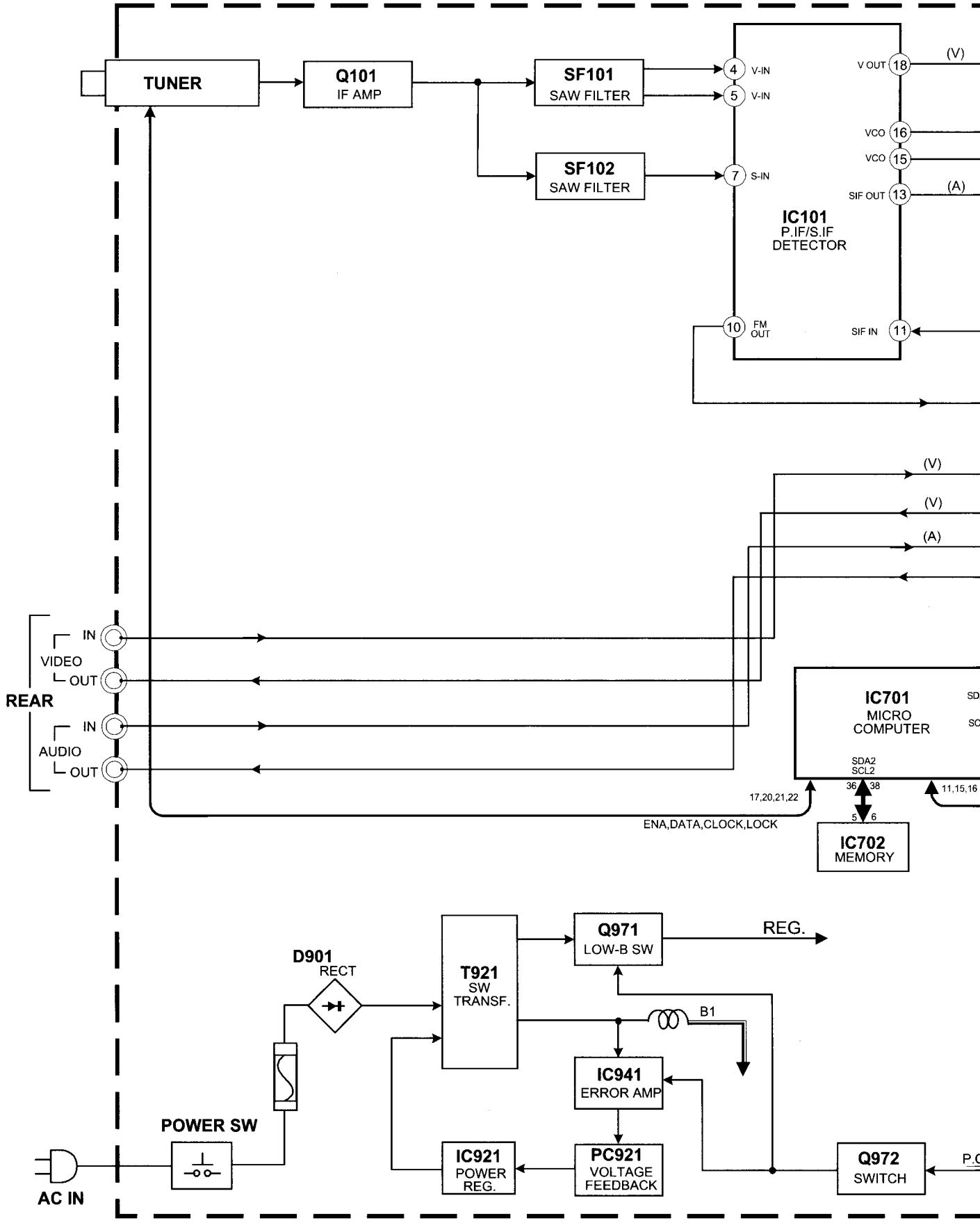
TOP VIEW		
		

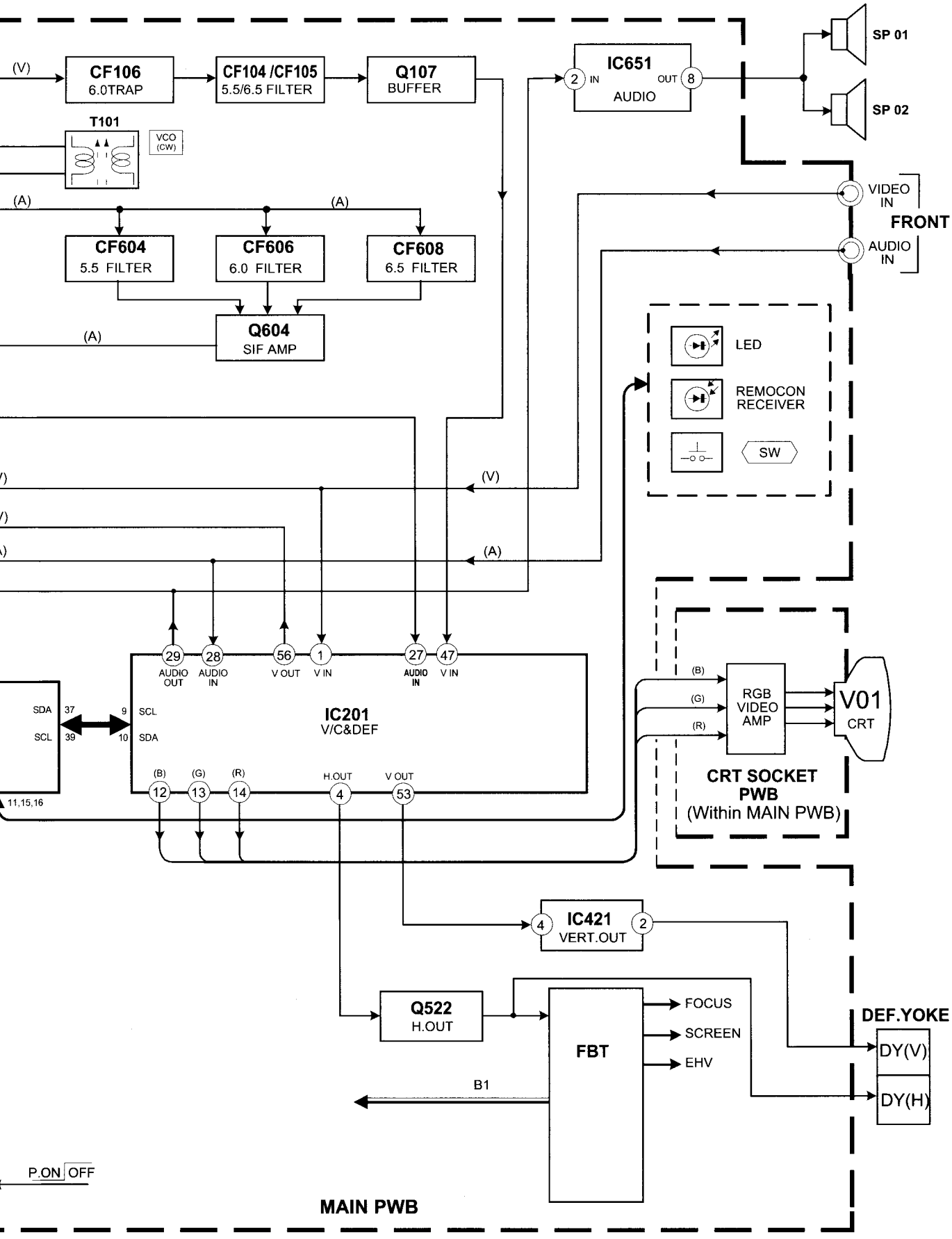
BLOCK DIAGRAMS [MULTI.]




(V)
CF106
6.0TRAP
CF104 /CF105
5.5/6.5 FILTER
CF601
4.5TRAP
IC651
2 IN
OUT 8
AUDIO
SP 01
SP 02
T101
VCO
(CW)
CF103
4.5MHz
Q107
BUFFER
(A)
VIDEO
IN
FRONT
AUDIO
IN
CF604
5.5 FILTER
CF606
6.0 FILTER
CF608
6.5 FILTER
Q604
SIF AMP
LED
REMOCON
RECEIVER
SW
29
AUDIO
OUT
28
AUDIO
IN
56
V OUT
1
V IN
27
AUDIO
IN
47
V IN
SDA
37
SCL
39
9
SCL
10
SDA
IC201
V/C&DEF
(B)
(G)
(R)
12
13
14
H.OUT
4
V OUT
53
11,15,16
RGB
VIDEO
AMP
V01
CRT
CRT SOCKET
PWB
(Within MAIN PWB)
IC421
VERT.OUT
4
2
Q522
H.OUT
FBT
FOCUS
SCREEN
EHV
B1
DEF.YOKE
DY(V)
DY(H)
P.ON
OFF
MAIN PWB

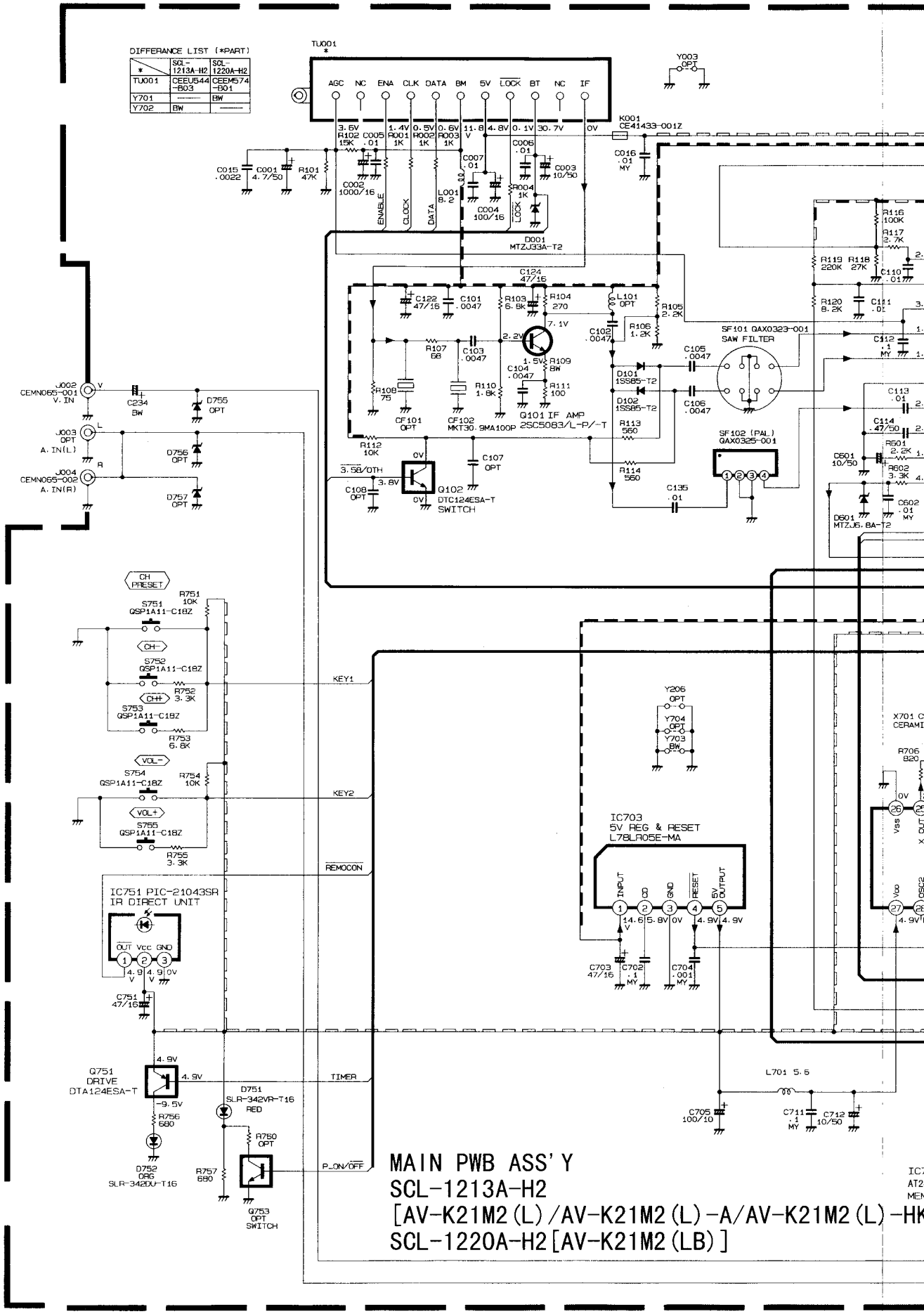
BLOCK DIAGRAMS [TRIPLE]

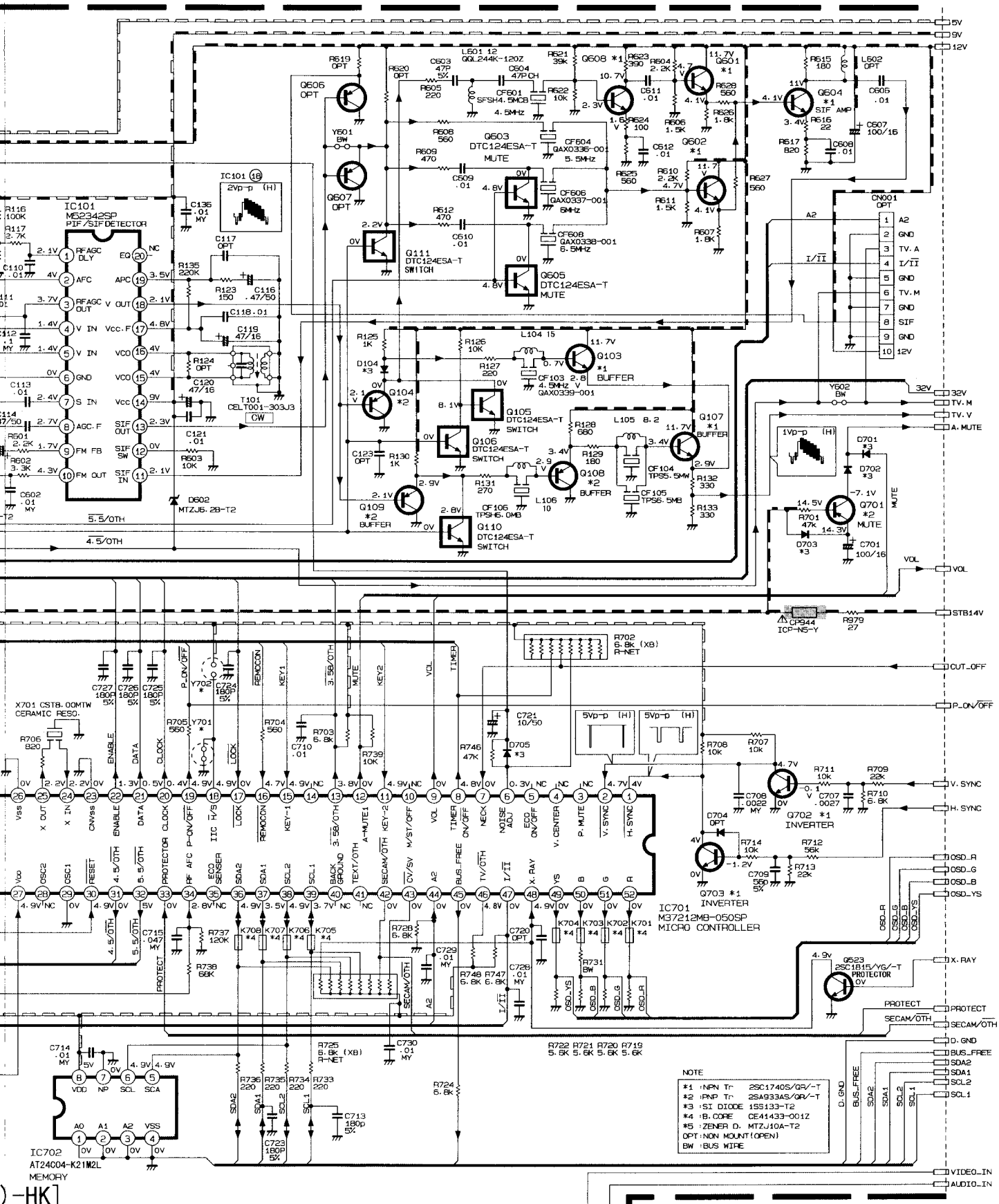



(V)
CF106
6.0TRAP
CF104 /CF105
5.5/6.5 FILTER
Q107
BUFFER
IC651
2 IN
OUT 8
AUDIO
SP 01
SP 02
T101
VCO
(CW)
(A)
(A)
VIDEO
IN
FRONT
AUDIO
IN
CF604
5.5 FILTER
CF606
6.0 FILTER
CF608
6.5 FILTER
Q604
SIF AMP
(A)
LED
REMOCON
RECEIVER
SW
(V)
(A)
29 AUDIO OUT
28 AUDIO IN
56 V OUT
1 V IN
27 AUDIO IN
47 V IN
SDA 37
SCL 39
9 SCL
10 SDA
IC201
V/C&DEF
(B)
(G)
(R)
12
13
14
H.OUT
4
V OUT
53
11,15,16
(B)
(G)
(R)
RGB
VIDEO
AMP
V01
CRT
CRT SOCKET
PWB
(Within MAIN PWB)
IC421
4
VERT.OUT
2
Q522
H.OUT
FBT
FOCUS
SCREEN
EHV
B1
DEF.YOKE
DY(V)
DY(H)
P.ON OFF
MAIN PWB

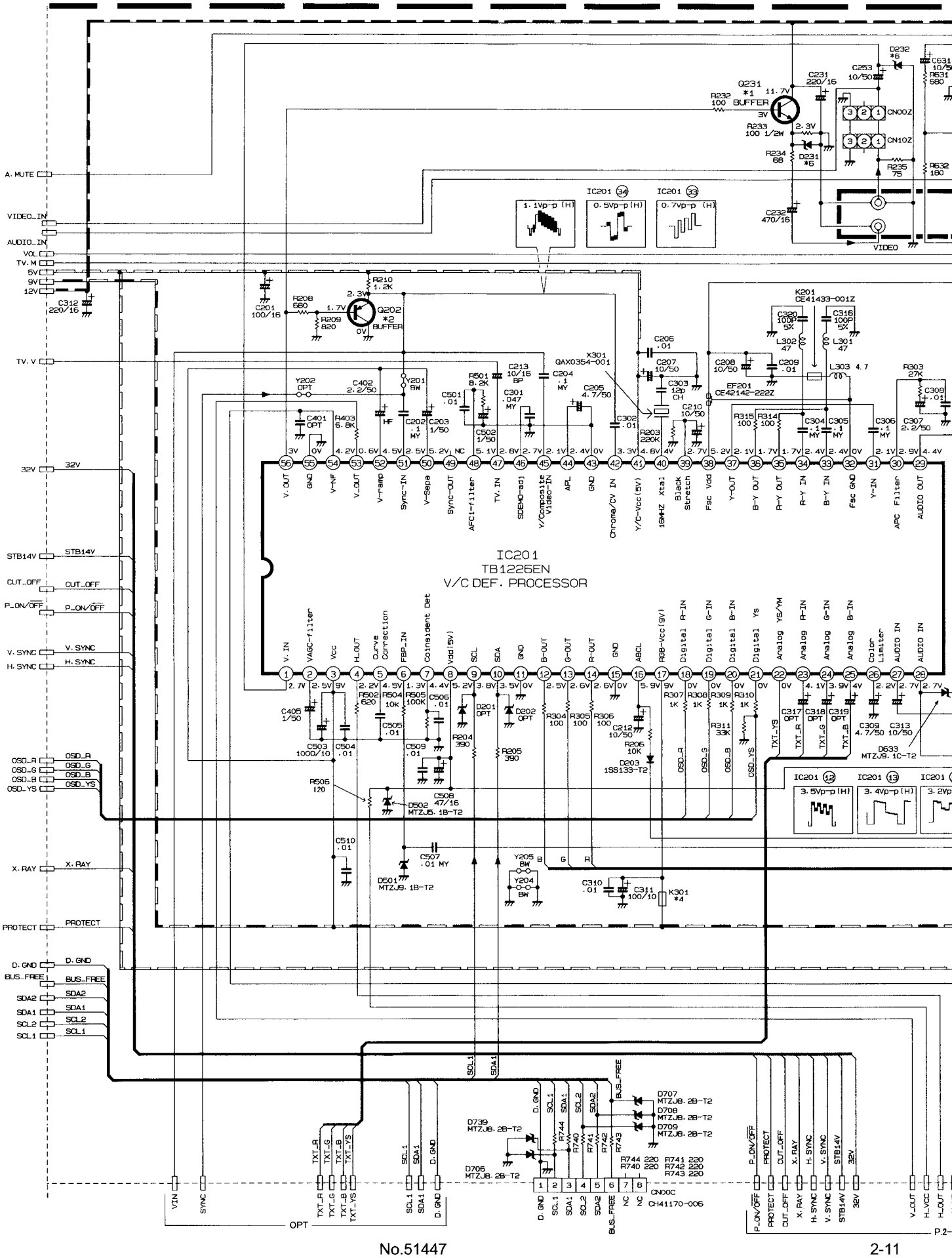
CIRCUIT DIAGRAMS

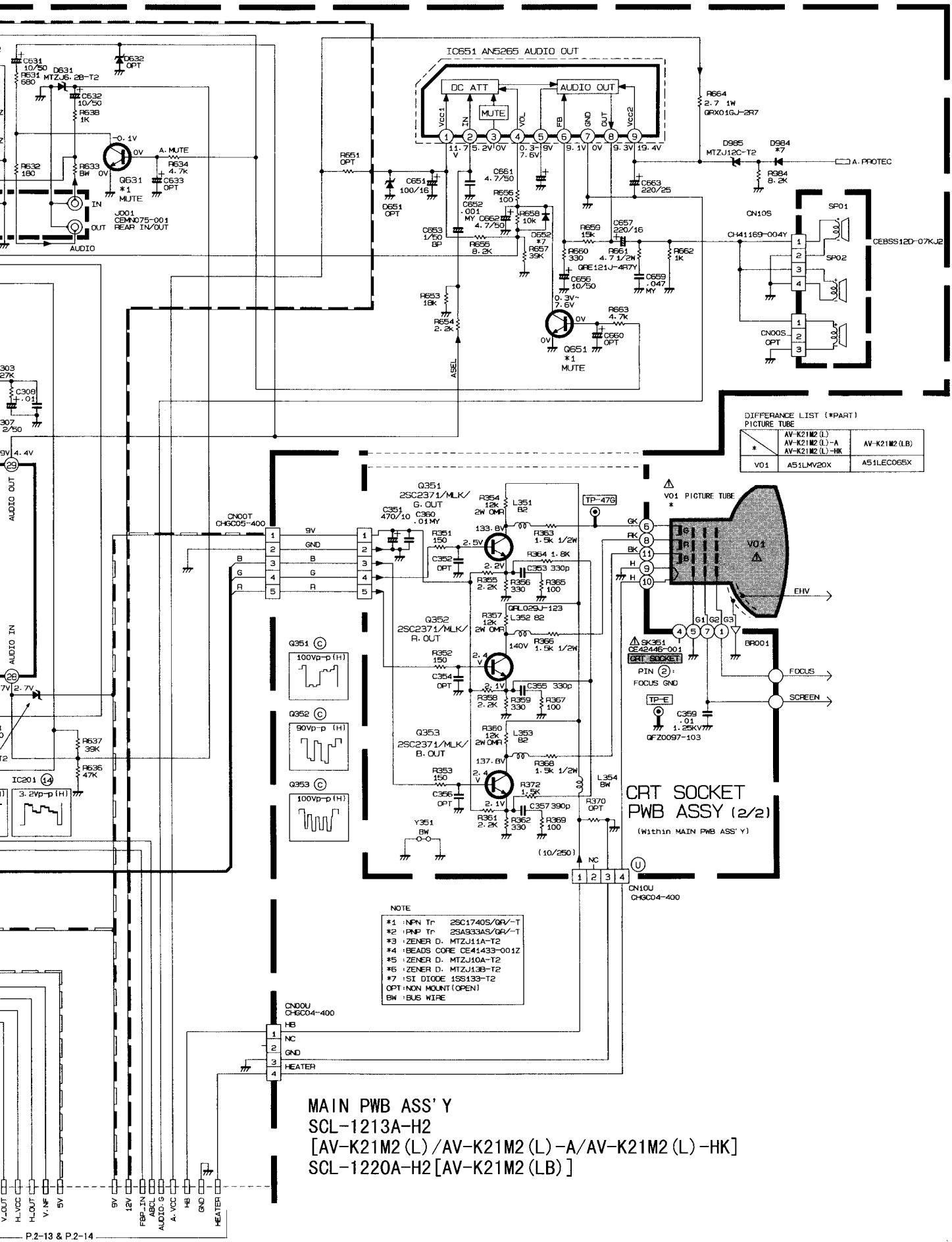
■ *MAIN PWB CIRCUIT DIAGRAM* [MULTI. (1/3)]




IC101
M52342SP
PIF/SIF DETECTOR
IC702
AT24C04-K21M2L
MEMORY
IC701
M37212MB-050SP
MICRO CONTROLLER
Q702 *1
INVERTER
Q703 *1
INVERTER
Q523
2SC1815/YG/-T
PROTECTOR
Q601
DTC124ESA-T
MUTE
Q602
*1
Q603
DTC124ESA-T
MUTE
Q604
*1
STIF AMP
Q605
DTC124ESA-T
MUTE
Q606
OPT
Q607
OPT
Q608 *1
Q701
*2
MUTE
Q702
*1
BUFFER
Q703
*1
Q704
*2
BUFFER
Q705
DTC124ESA-T
SWITCH
Q106
DTC124ESA-T
SWITCH
Q107
*1
BUFFER
Q108
*2
BUFFER
Q109
*2
BUFFER
Q110
DTC124ESA-T
SWITCH
Q111
DTC124ESA-T
SWITCH
CN001
OPT
T101
CELT001-303J3
CW
X701 CST8.00MTW
CERAMIC RESO.
D602
MTZJ6.2B-T2
D701
*3
D702
*3
D703
*3
D704
OPT
D705
*3
CF601
SFSH4.5MCB
4.5MHz
CF603 2.8
4.5MHz V
QAX0339-001
CF604
QAX0336-001
5.5MHz
CF606
QAX0337-001
6MHz
CF608
QAX0338-001
6.5MHz
CF104
TPS5.5MB
CF105
TPS6.5MB
CF105
TPSH6.0MB
L501 12
QQL244K-120Z
L502
OPT
L104 15
L105 8.2
L106
10
CP344
ICP-N5-Y
R702
6.8K (XB)
P-NET
R725
6.8K (XB)
P-NET
R722 R721 R720 R719
5.6K 5.6K 5.6K 5.6K
NOTE
*1 :NPN Tr 2SC1740S/QR/-T
*2 :PNP Tr 2SA933AS/QR/-T
*3 :SI DIODE 1SS133-T2
*4 :B.CORE CE41433-001Z
*5 :ZENER D. MTZJ10A-T2
OPT:NON MOUNT(OPEN)
BW :BUS WIRE
5V
9V
12V
32V
TV.M
TV.V
A.MUTE
VOL
STB14V
CUT_OFF
P_ON/OFF
V.SYNC
H.SYNC
OSD_R
OSD_G
OSD_B
OSD_YS
X.RAY
PROTECT
SECAM/OTH
D.GND
BUS_FREE
SDA2
SDA1
SCL2
SCL1
VIDEO_IN
AUDIO_IN
A2
GND
TV.A
I/II
TV.M
SIF
5.5/OTH
4.5/OTH

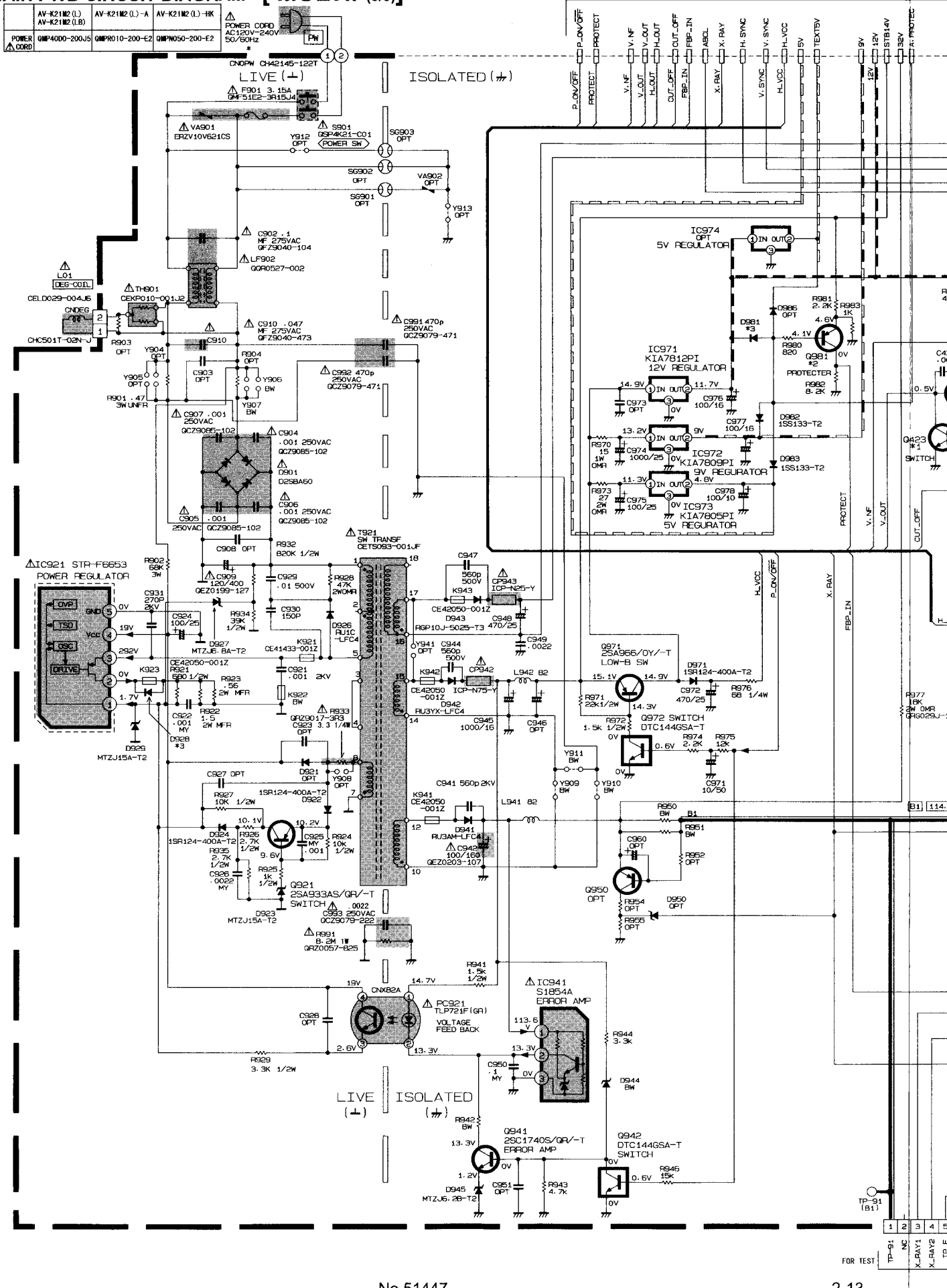
■ *MAIN PWB CIRCUIT DIAGRAM* [MULTI. (2/3)]

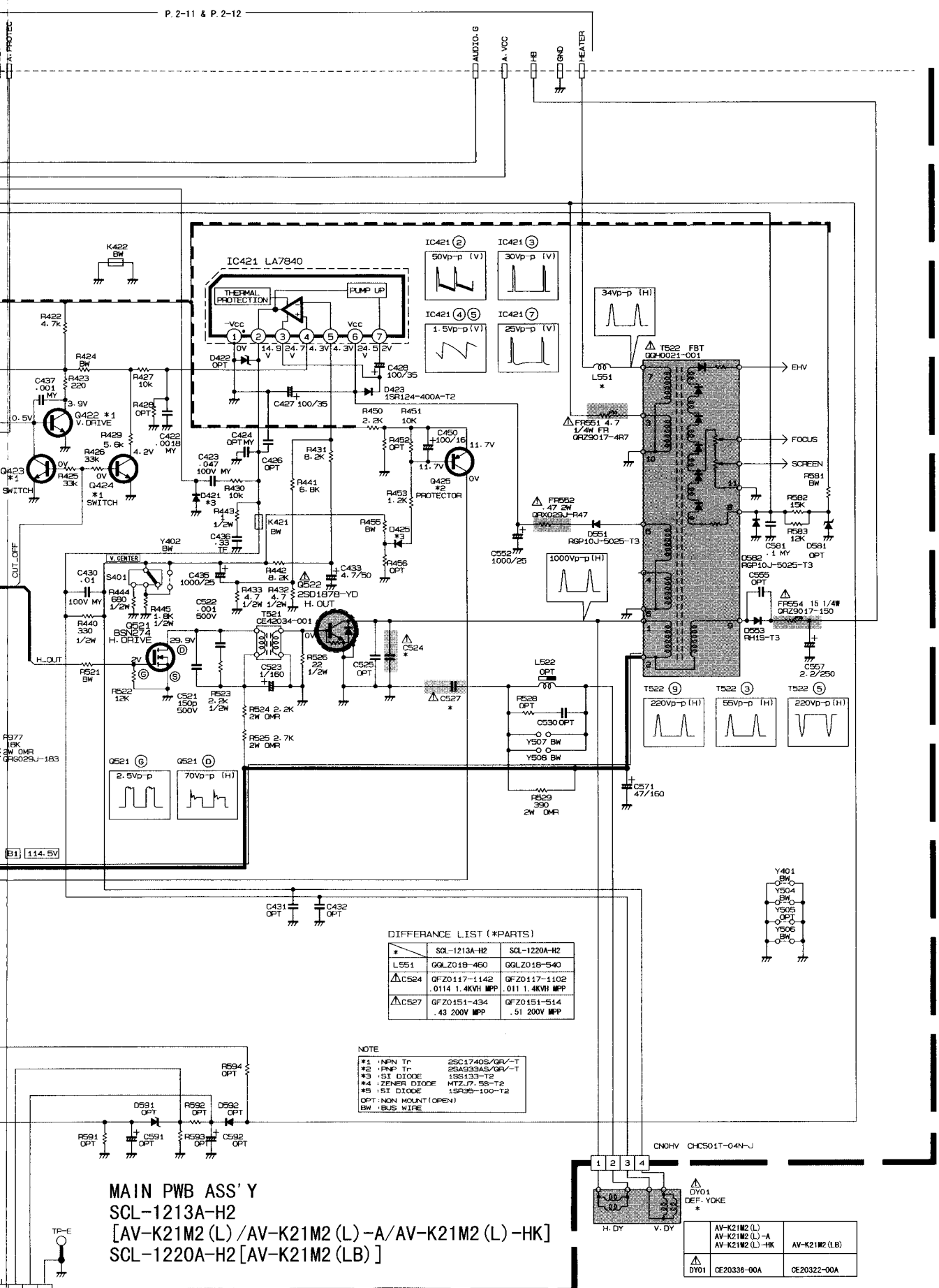




MAIN PWB ASS'Y
SCL-1213A-H2
[AV-K21M2(L)/AV-K21M2(L)-A/AV-K21M2(L)-HK]
SCL-1220A-H2[AV-K21M2(LB)]

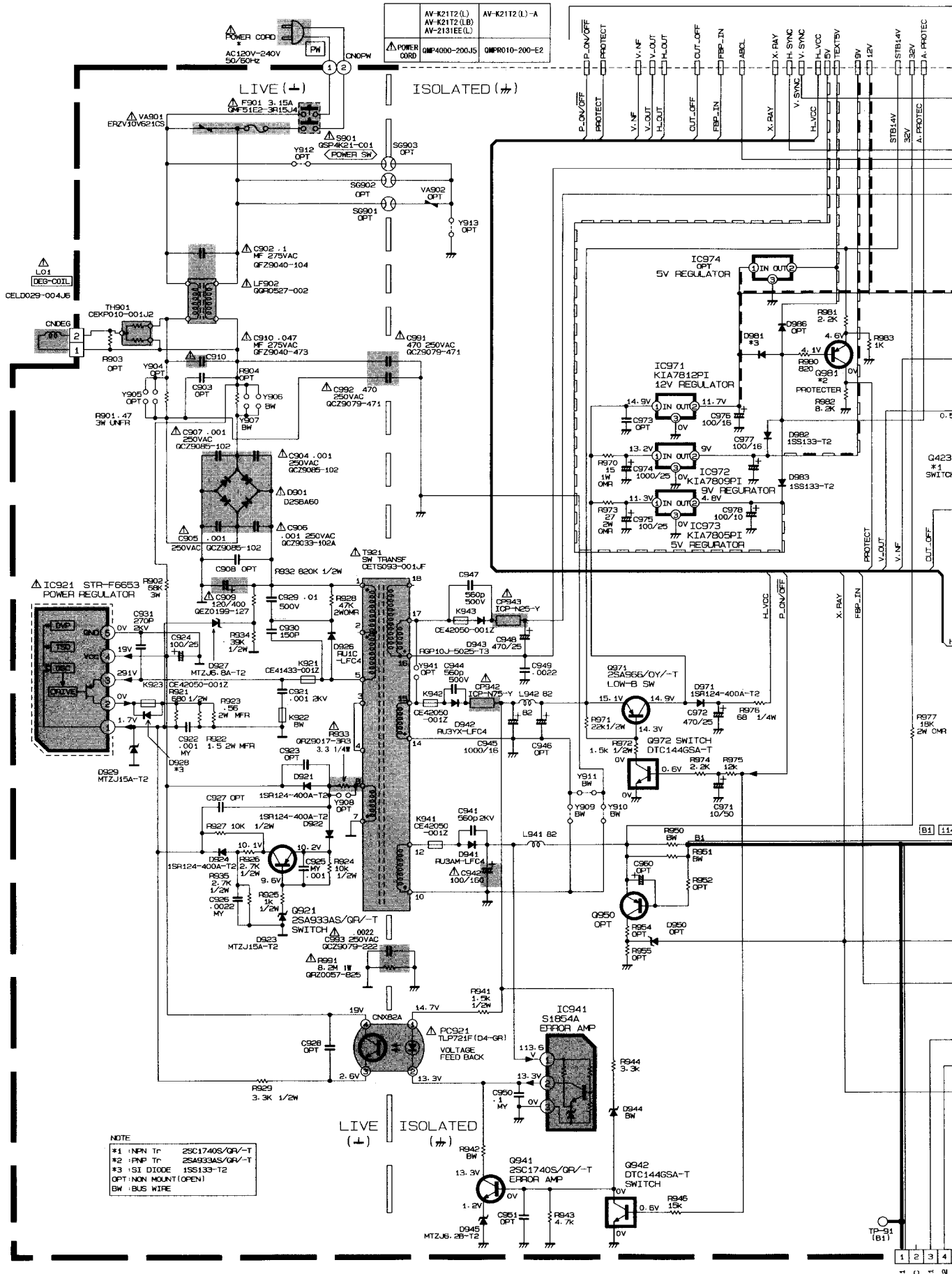
■ MAIN PWB CIRCUIT DIAGRAM [MULTI. (3/3)]

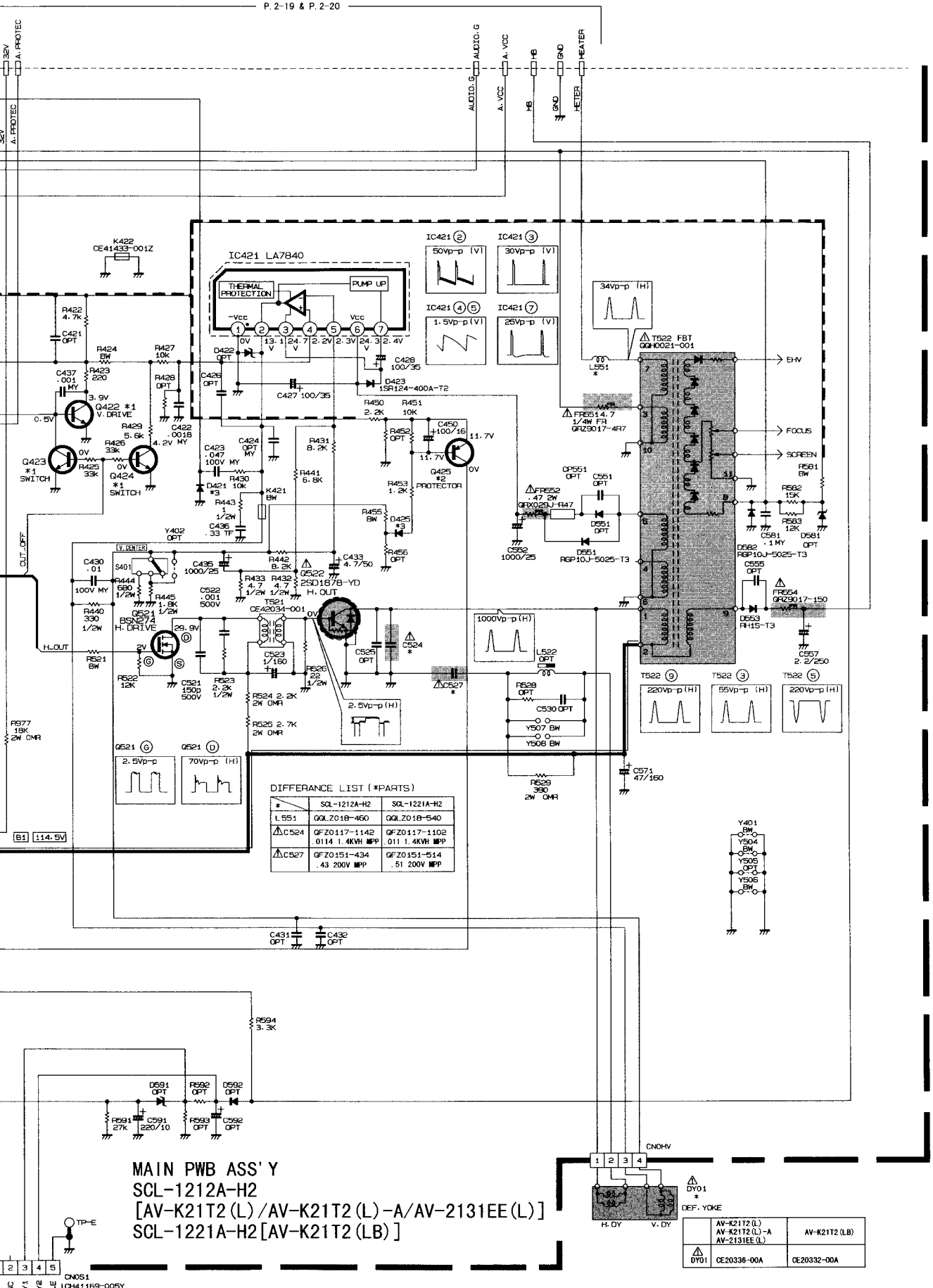




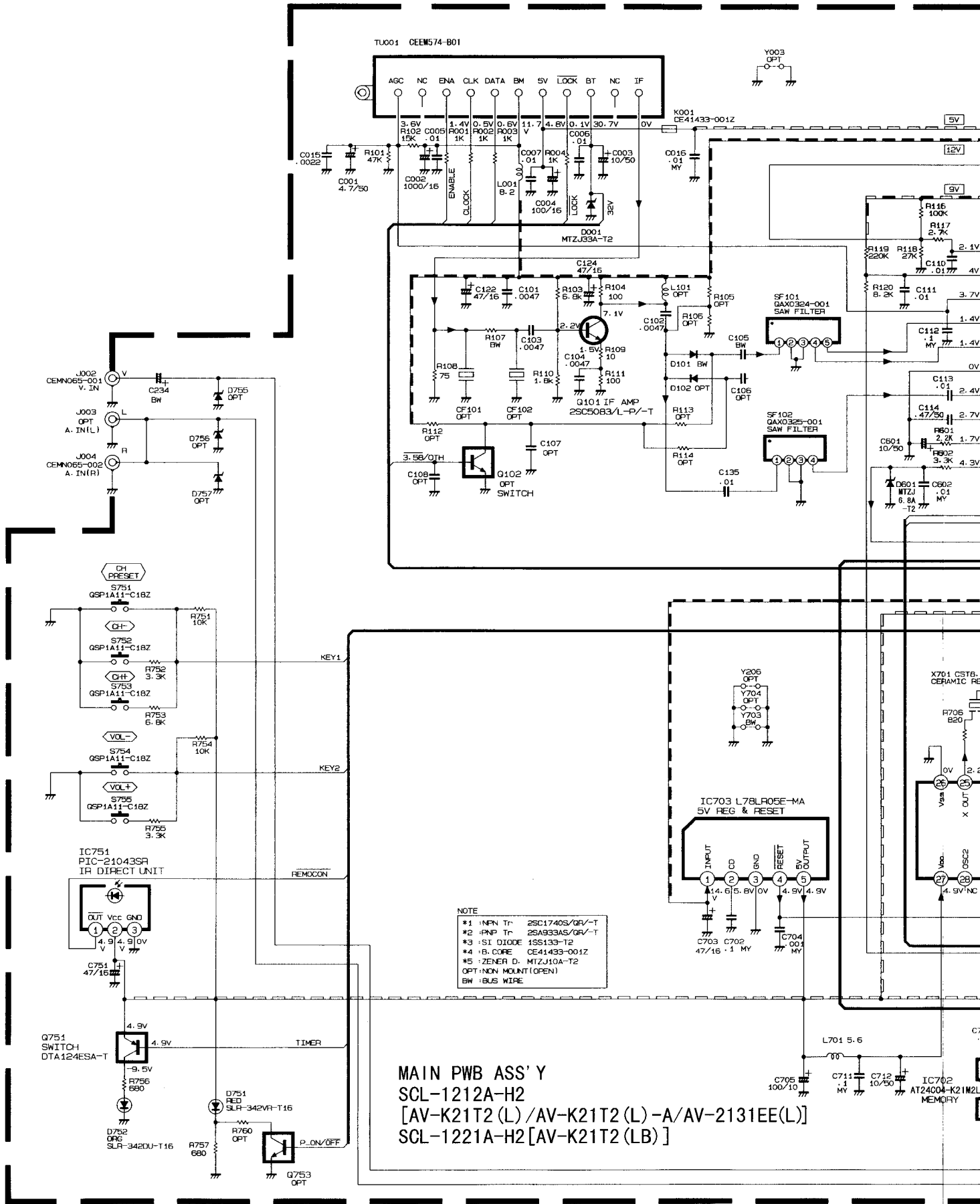
MAIN PWB ASS'Y
SCL-1213A-H2
[AV-K21M2 (L)/AV-K21M2 (L)-A/AV-K21M2 (L)-HK]
SCL-1220A-H2 [AV-K21M2 (LB)]

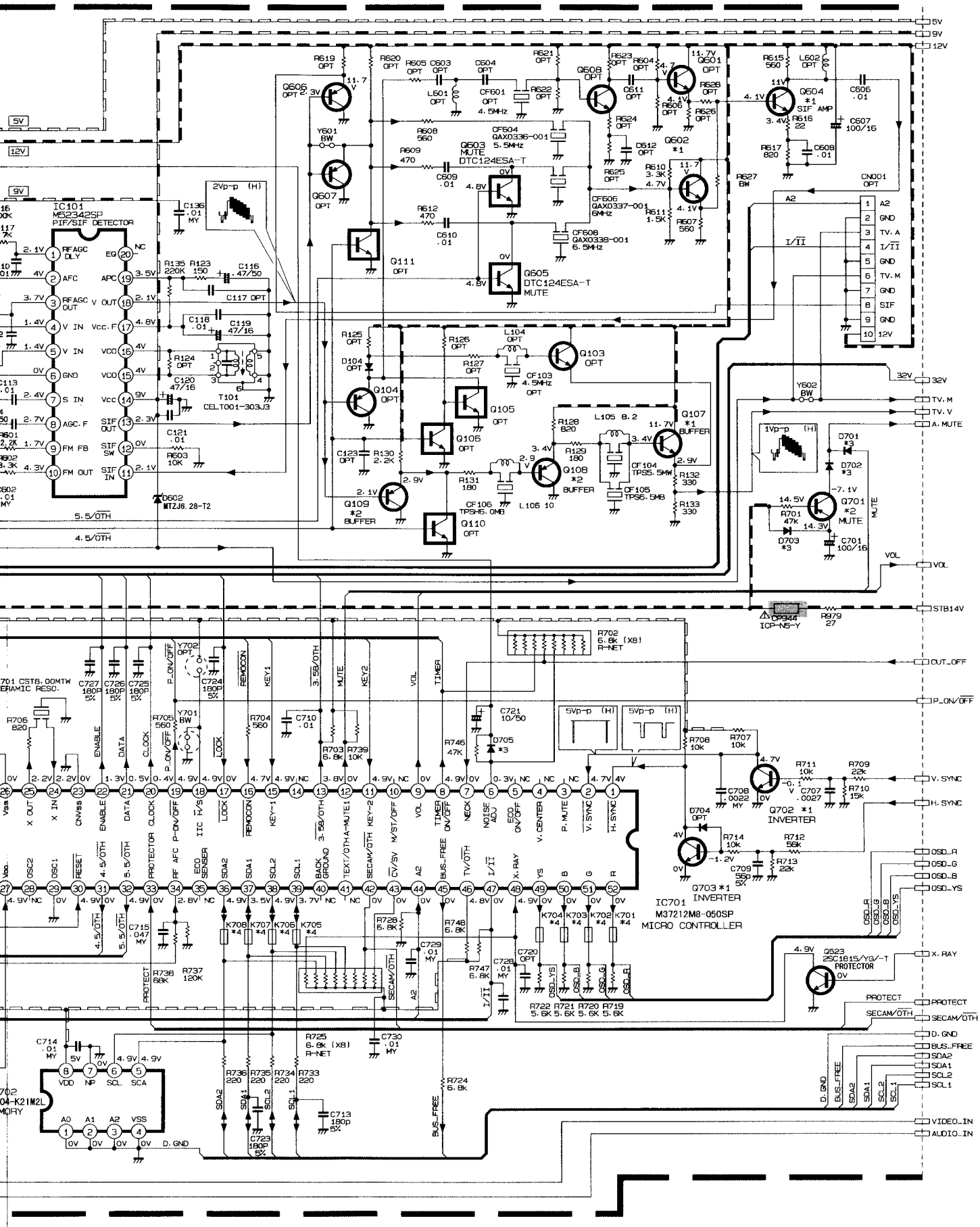
■ *MAIN PWB CIRCUIT DIAGRAM* [TRIPLE (1/3)]



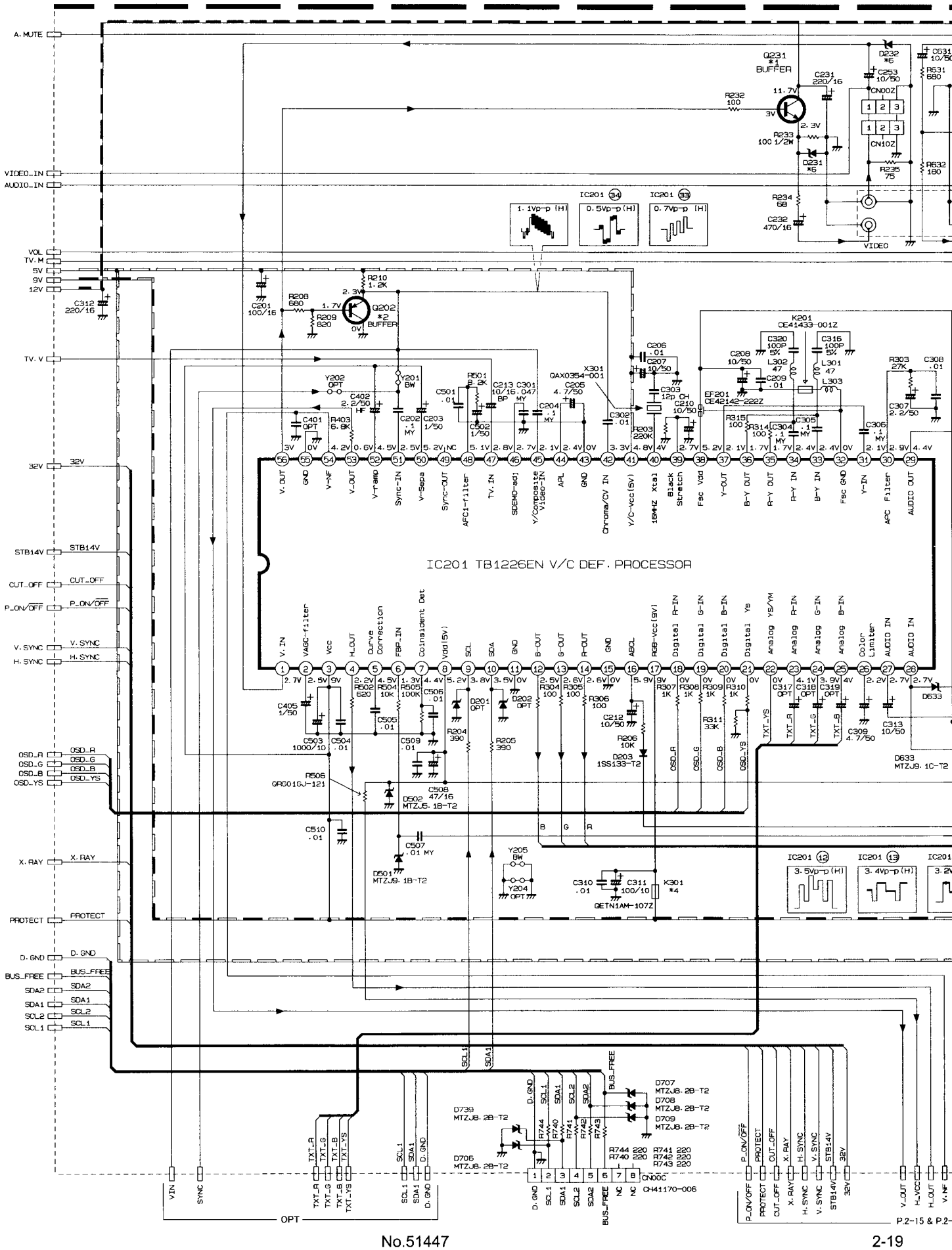

P. 2-19 & P. 2-20
IC421 LA7840
THERMAL PROTECTION
PUMP UP
DIFFERANCE LIST (*PARTS)
SCL-1212A-H2
SCL-1221A-H2
MAIN PWB ASS'Y
SCL-1212A-H2
[AV-K21T2(L)/AV-K21T2(L)-A/AV-2131EE(L)]
SCL-1221A-H2[AV-K21T2(LB)]
DEF. YOKE
FOR TEST

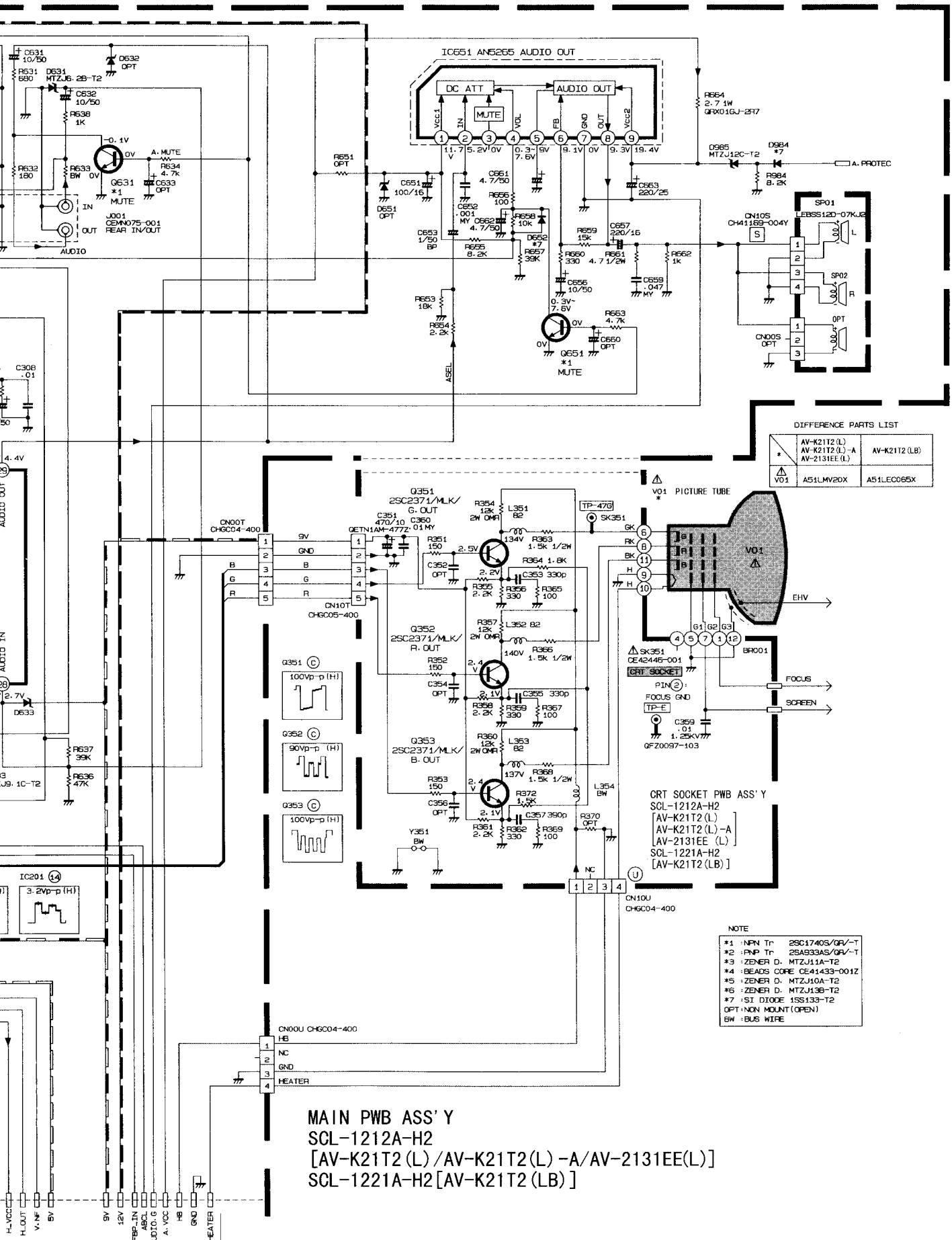
■ *MAIN PWB CIRCUIT DIAGRAM* [TRIPLE (2/3)]




IC101
M52342SP
PIF/SIF DETECTOR
IC701
M37212M8-050SP
MICRO CONTROLLER
Q701 *2 MUTE
Q702 *1 INVERTER
Q703 *1 INVERTER
Q523 2SC1815/YG/-T PROTECTOR
Q504 *1 SIF AMP
Q602 *1
Q603 MUTE DTC124ESA-T
Q605 DTC124ESA-T MUTE
Q107 *1 BUFFER
Q108 *2 BUFFER
Q109 *2 BUFFER
D602 MTZJ6.28-T2
T101 CELT001-303J3
CF504 GAX0336-001 5.5MHz
CF506 GAX0337-001 6MHz
CF508 GAX0338-001 6.5MHz
CF103 4.5MHz
CF601 4.5MHz
CF104 TPS5.5MB
CF105 TPS6.5MB
CF106 TPSH6.0MB
R702 6.8K (X8) R-NET
R725 6.8K (X8) R-NET
K701 *4
K702 *4
K703 *4
K704 *4
K705 *4
K706 *4
K707 *4
K708 *4
CN001 OPT
5V
9V
12V
32V
TV.M
TV.V
A.MUTE
VOL
STB14V
P_ON/OFF
CUT_OFF
V.SYNC
H.SYNC
OSD_R
OSD_G
OSD_B
OSD_YS
X.RAY
PROTECT
SECAM/OTH
D.GND
BUS_FREE
SDA2
SDA1
SCL2
SCL1
VIDEO_IN
AUDIO_IN

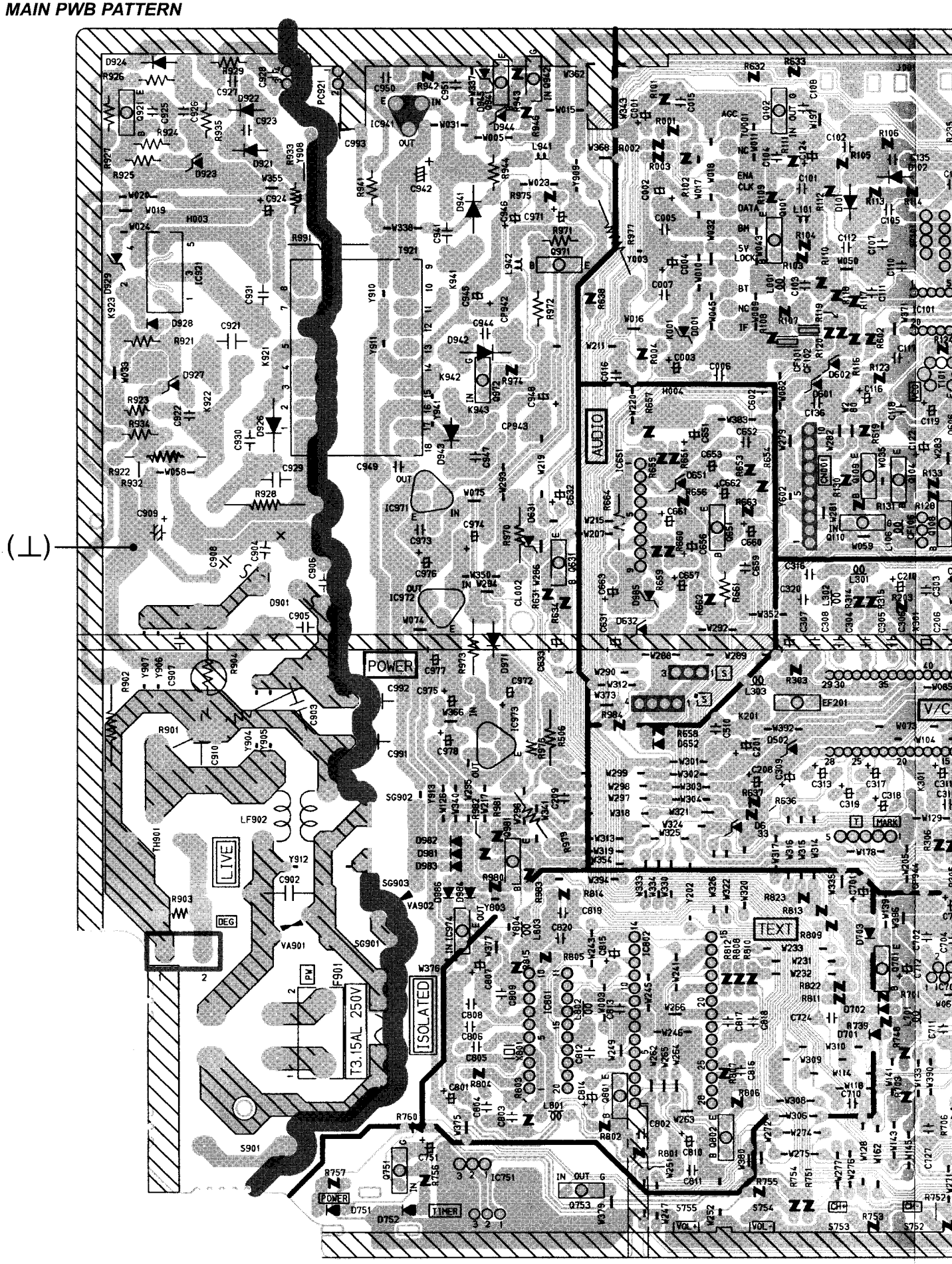
■ *MAIN PWB CIRCUIT DIAGRAM* [TRIPLE (3/3)]

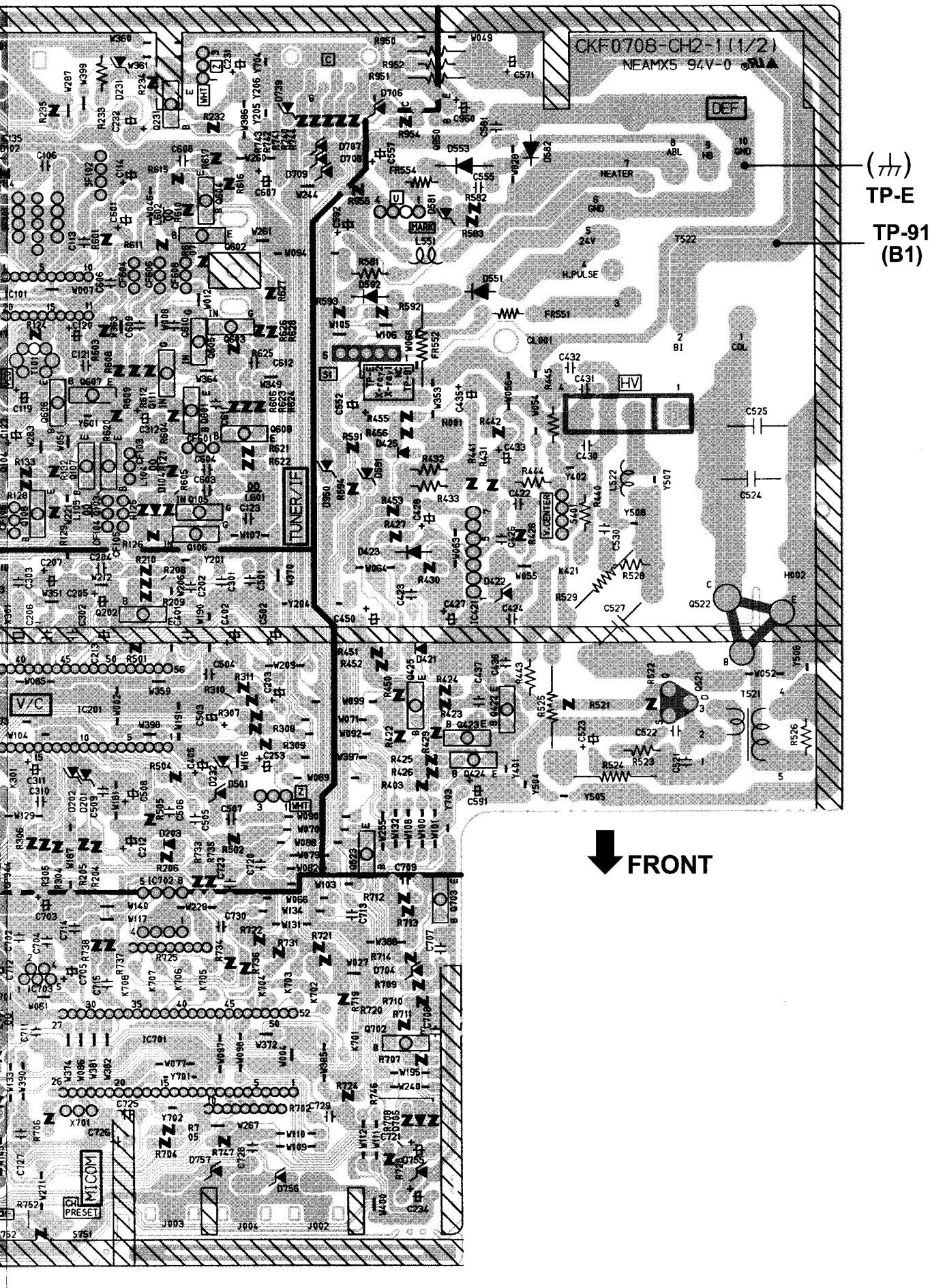



IC651 AN5265 AUDIO OUT
DC ATT
AUDIO OUT
MUTE
Vcc1
IN
VOL
FB
GND
OUT
Vcc2
11.7 V
5.2V
0V
0.3~ 7.6V
9V
9.1V
0V
9.3V
19.4V
A. MUTE
MUTE
AUDIO
J001 CEMN075-001 REAR IN/OUT
A. PROTEC
SP01 LEBSS12D-07KJ2
SP02
OPT
CN10S CH41169-004Y
CN00S OPT
ASEL
DIFFERENCE PARTS LIST
AV-K21T2(L) AV-K21T2(L)-A AV-2131EE(L)
AV-K21T2(LB)
V01
A51LMV20X
A51LEC065X
V01 PICTURE TUBE
CN00T CHGC04-400
CN10T CHGC05-400
Q351 2SC2371/MLK/ G. OUT
Q352 2SC2371/MLK/ R. OUT
Q353 2SC2371/MLK/ B. OUT
TP-476
SK351
EHV
FOCUS
SCREEN
CRT SOCKET
FOCUS GND
TP-E
QFZ0097-103
CRT SOCKET PWB ASS'Y
SCL-1212A-H2
[AV-K21T2(L)
AV-K21T2(L)-A
AV-2131EE (L)]
SCL-1221A-H2
[AV-K21T2(LB)]
CN10U CHGC04-400
NOTE
*1 :NPN Tr 2SC1740S/QR/-T
*2 :PNP Tr 2SA933AS/QR/-T
*3 :ZENER D. MTZJ11A-T2
*4 :BEADS CORE CE41433-001Z
*5 :ZENER D. MTZJ10A-T2
*6 :ZENER D. MTZJ13B-T2
*7 :SI DIODE 1SS133-T2
OPT:NON MOUNT(OPEN)
BW :BUS WIRE
CN00U CHGC04-400
HB
NC
GND
HEATER
MAIN PWB ASS'Y
SCL-1212A-H2
[AV-K21T2(L)/AV-K21T2(L)-A/AV-2131EE(L)]
SCL-1221A-H2[AV-K21T2(LB)]

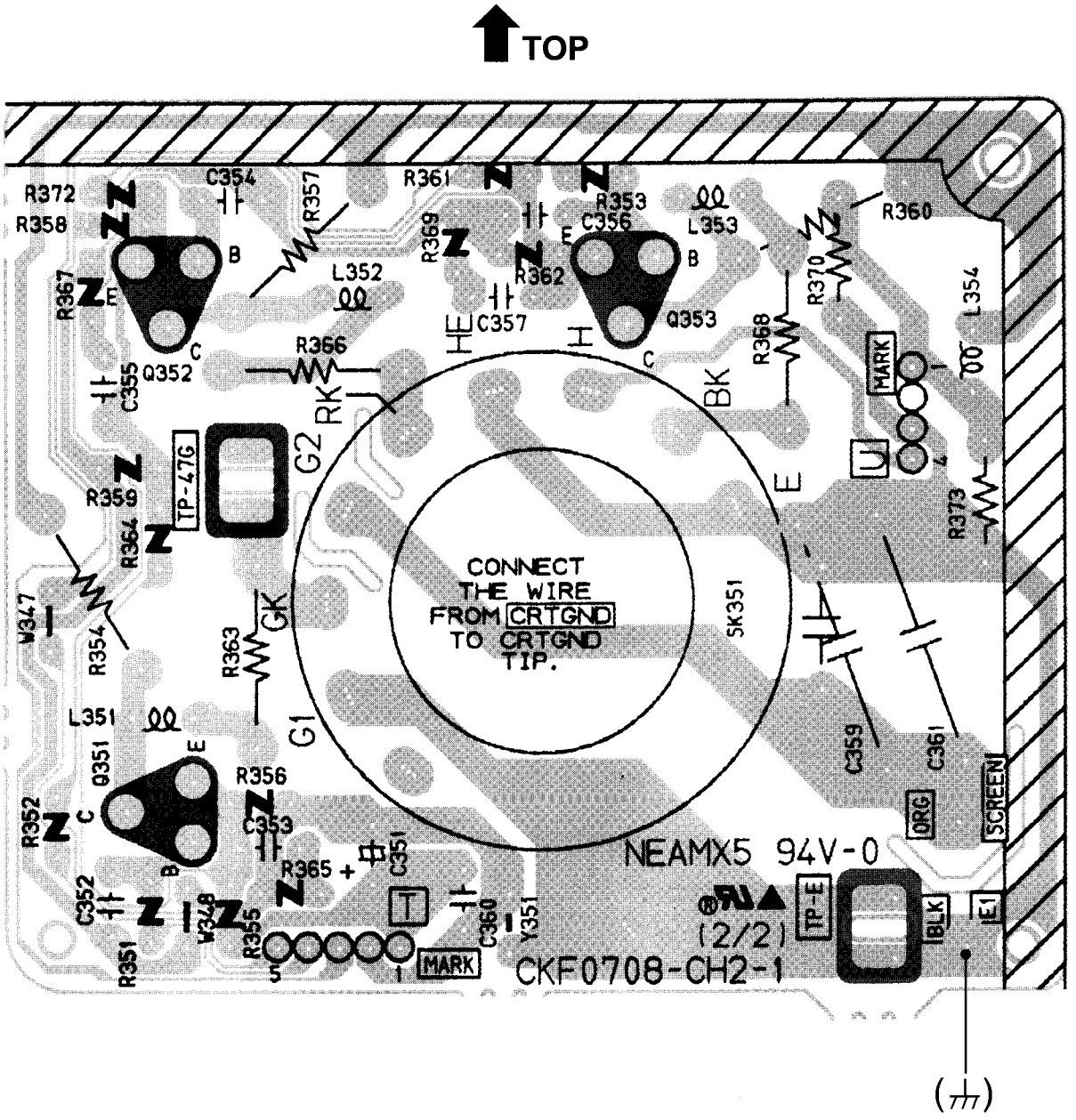
PATTERN DIAGRAMS *(COMMON)*

■ *MAIN PWB PATTERN*




CKF0708-CH2-1(1/2)
NEAMX5 94V-0
TP-E
TP-91
(B1)
FRONT
TUNER/IF
V/C
MICOM
DEF
HV
MARK
HEATER
H.PULSE
V.CENTER

■ *CRT SOCKET PWB PATTERN (With in MAIN PWB)*



PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety. Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines —— in the Parts No. columns will not be supplied.
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied.

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

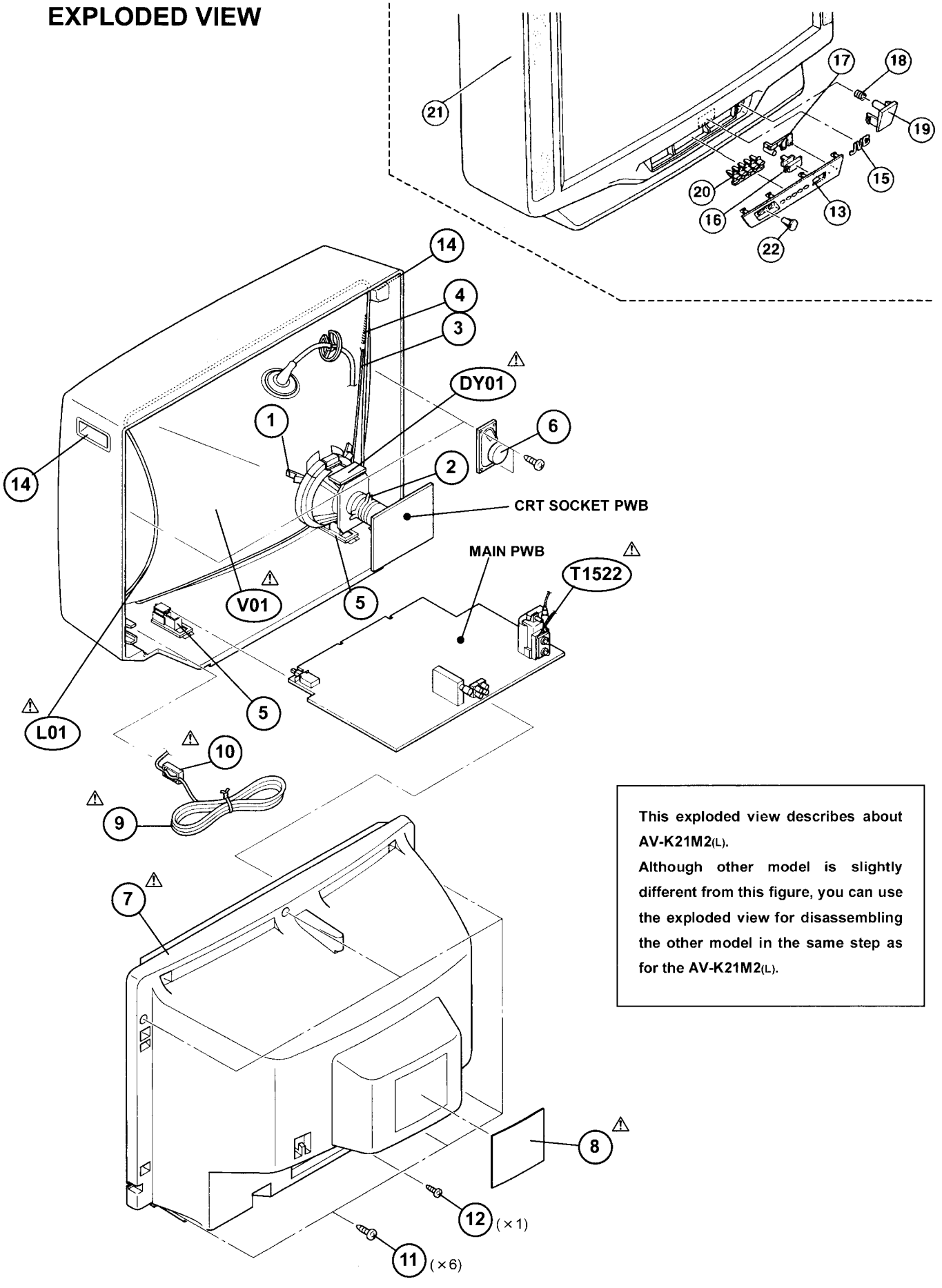
RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% -0%

EXPLODED VIEW PARTS LIST

⚠	Ref. No.	Part No.	Part Name	Description	Local
⚠	V01	A51LEC065X	PICTURE TUBE(C)	[AV-K21M2(LB)/AV-K21T2(LB)]	
⚠	V01	A51LMV20X	PICTURE TUBE(C)	[Other models]	
⚠	DY01	CE20332-00A	DEF YOKE	[AV-K21M2(LB)/AV-K21T2(LB)]	
⚠	DY01	CE20336-00A	DEF YOKE	[Other models]	
⚠	L01	CELD029-004J6	DEG. COIL		
⚠	T1522	QQH0021-001	FLYBACK. TRANSF.		
	1	CE40764-00A	WEDGE ASSY	(×3)	
	2	A75034-B	P. C. MAGNET		
	3	CHGB0016-0B-FH	BRAIDED WIRE		
	4	A48457-3-H	SPRING		
	5	CM36623-B01-H	CHASSIS RAIL	(×2)	
	6	CEBSS12D-07KJ2	SPEAKER	(×2) SP01, SP02	
⚠	7	CM12956-B01-VH	REAR COVER		
⚠	8	CM22925-001	RATING LABEL	[AV-K21M2(L)/AV-K21M2(LB)]	
⚠	8	CM22880-002	RATING LABEL	[AV-K21M2(L)-A/AV-K21T2(L)-A]	
⚠	8	CM22925-012	RATING LABEL	[AV-K21M2(L)-HK]	
⚠	8	CM22925-010	RATING LABEL	[AV-K21T2(L)/AV-K21T2(LB)]	
⚠	8	CM22925-009	RATING LABEL	[AV-2131EE(L)]	
⚠	9	QMP40D0-200J5	POWER CORD	[AV-K21M2(L)/AV-K21M2(LB)] [AV-K21T2(L)/AV-K21T2(LB)] [AV-2131EE(L)]	
⚠	9	QMPR010-200-E2	POWER CORD	[AV-K21M2(L)-A/AV-K21T2(L)-A]	
⚠	9	QMPN050-200-E2	POWER CORD	[AV-K21M2(L)-HK]	
⚠	10	CM47005-A01-H	CORD CLAMP		
	11	GBSF4016Z-H	TAPPING SCREW	(×6)	
	12	SBSF3010Z-H	TAPPING SCREW		
	13	CM12957-007-H	CONTROL WINDOW		
	14	CM23142-B01-H	HAND INSULATER	(×2)	
	15	CM48147-001-H	JVC MARK		
	16	CM36637-D01-H	CDS WINDOW		
	17	CM36599-B01-H	LED/RM LENS		
	18	CM35235-003-H	SPRING		
	19	CM36600-B01-H	POWER KNOB		
	20	CM36598-C01-H	CONTROL KNOB		
	21	CM12955-013-H	FRONT CABINET	[AV-K21T2(L)/AV-K21T2(L)-A] [AV-K21T2(LB)]	
	21	CM12955-019-H	FRONT CABINET	[AV-2131EE(L)]	
	21	CM12955-012-H	FRONT CABINET	[Other models]	
	22	CM36601-001-H	PIN CAP		

EXPLODED VIEW



This exploded view describes about **AV-K21M2**(L).
Although other model is slightly different from this figure, you can use the exploded view for disassembling the other model in the same step as for the **AV-K21M2**(L).

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C1552	QETM1EM-108	E CAP.	1000μF 25V	M
	C1557	QETN2EM-225Z	E CAP.	2.2μF 250V	M
	C1571	QEHB2CM-476	E CAP.	47μF 160V	M
	C1581	QFLC1HJ-104Z	M CAP.	0.1μF 50V	J
	C1591	QETN1AM-227Z	E CAP.	220μF 10V	M
	C1601	QETN1HM-106Z	E CAP.	10μF 50V	M
	C1602	QFLC1HJ-103Z	M CAP.	0.01μF 50V	J
	C1603	QCS31HJ-470Z	C CAP.	47pF 50V	J
	C1604	QDC31HJ-470Z	C CAP.	47pF 50V	J
	C1606	QCB31HK-103Z	C CAP.	0.01μF 50V	K
	C1607	QETN1CM-107Z	E CAP.	100μF 16V	M
	C1608-12	QCB31HK-103Z	C CAP.	0.01μF 50V	K
	C1631-32	QETN1HM-106Z	E CAP.	10μF 50V	M
	C1651	QETN1CM-107Z	E CAP.	100μF 16V	M
	C1652	QFN31HJ-102Z	M CAP.	1000pF 50V	J
	C1653	QEN61HM-105Z	BP E CAP.	1μF 50V	M
	C1656	QETN1HM-106Z	E CAP.	10μF 50V	M
	C1657	QETN1CM-227Z	E CAP.	220μF 16V	M
	C1659	QFLC1HJ-473Z	M CAP.	0.047μF 50V	J
	C1661-62	QETN1HM-475Z	E CAP.	4.7μF 50V	M
	C1663	QETN1EM-227Z	E CAP.	220μF 25V	M
	C1701	QETN1CM-107Z	E CAP.	100μF 16V	M
	C1702	QFLC1HJ-104Z	M CAP.	0.1μF 50V	J
	C1703	QETN1CM-476Z	E CAP.	47μF 16V	M
	C1704	QFN31HJ-102Z	M CAP.	1000pF 50V	J
	C1705	QETN1AM-107Z	E CAP.	100μF 10V	M
	C1707	QCB31HK-272Z	C CAP.	2700pF 50V	K
	C1708	QFN31HJ-222Z	M CAP.	2200pF 50V	J
	C1709	QCS31HJ-560Z	C CAP.	56pF 50V	J
	C1710	QCB31HK-103Z	C CAP.	0.01μF 50V	K
	C1711	QFLC1HJ-104Z	M CAP.	0.1μF 50V	J
	C1712	QETN1HM-106Z	E CAP.	10μF 50V	M
	C1713	QCS31HJ-181Z	C CAP.	180pF 50V	J
	C1714	QFLC1HJ-103Z	M CAP.	0.01μF 50V	J
	C1715	QFLC1HJ-473Z	M CAP.	0.047μF 50V	J
	C1721	QETN1HM-106Z	E CAP.	10μF 50V	M
	C1723-27	QCS31HJ-181Z	C CAP.	180pF 50V	J
	C1728-30	QFLC1HJ-103Z	M CAP.	0.01μF 50V	J
	C1751	QETN1CM-476Z	E CAP.	47μF 16V	M
⚠	C1902	QFZ9040-104	MF CAP.	0.1μFAC275V	M
⚠	C1904	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠	C1905	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠	C1906	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠	C1907	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠	C1909	QEZ0199-127	E CAP.	120μF 400V	M
⚠	C1910	QFZ9040-473	MF CAP.	0.047μFAC275V	M
	C1921	QCZ0325-102	C CAP.	1000pF 2kV	K
	C1922	QFN31HJ-102Z	M CAP.	1000pF 50V	J
	C1924	QETN1EM-107Z	E CAP.	100μF 25V	M
	C1925	QFN31HJ-102Z	M CAP.	1000pF 50V	J
	C1926	QFN31HJ-222Z	M CAP.	2200pF 50V	J
	C1929	QCB32HK-103	C CAP.	0.01μF 500V	K
	C1930	QCZ0122-151	C CAP.	150pF 200V	K
	C1931	QCZ0122-271	C CAP.	270pF 200V	K
	C1941	QCZ0122-561	C CAP.	560pF 2kV	K
	C1942	QEZ0203-107	E CAP.	100μF 160V	M
	C1944	QCB32HK-561Z	C CAP.	560pF 500V	K
	C1945	QETN1CM-108Z	E CAP.	1000μF 16V	M
	C1947	QCB32HK-561Z	C CAP.	560pF 500V	K
	C1948	QETN1EM-477Z	E CAP.	470μF 25V	M
	C1949	QCB31HK-222Z	C CAP.	2200pF 50V	K
	C1950	QFLC1HJ-104Z	M CAP.	0.1μF 50V	J
	C1971	QETN1HM-106Z	E CAP.	10μF 50V	M
	C1972	QETN1EM-477Z	E CAP.	470μF 25V	M
	C1974	QETM1EM-108	E CAP.	1000μF 25V	M
	C1975	QETN1EM-107Z	E CAP.	100μF 25V	M
	C1976-77	QETN1CM-107Z	E CAP.	100μF 16V	M
	C1978	QETN1AM-107Z	E CAP.	100μF 10V	M
⚠	C1991	QCZ9079-471	C CAP.	470pFAC250V	K
⚠	C1992	QCZ9079-471	C CAP.	470pFAC250V	K
⚠	C1993	QCZ9079-222	C CAP.	2200pFAC250V	M

TRANSFORMER

⚠	Symbol No.	Part No.	Part Name
	T1101	CELT001-303J3	C.WAVE TRANSF.
	T1521	CE42034-001	H.DRIVE TRANSF.
⚠	T1522	QQH0021-001	FLYBACK TRANSF.
⚠	T1921	CETS093-001JF	SWITCH.TRANSF.

COIL

Symbol No.	Part No.	Part Name	Description	Local
L1001	QQL244K-8R2Z	COIL	8.2μH	K
L1104	QQL244K-150Z	COIL	15μH	K
L1105	QQL244K-8R2Z	COIL	8.2μH	K
L1106	QQL244K-100Z	COIL	10μH	K
L1301-02	QQL244K-470Z	COIL	47μH	K
L1303	QQL244K-4R7Z	COIL	4.7μH	K
L1351-53	QQL244K-820Z	COIL	82μH	K
L1551	QQLZ018-460	HEATER CHOKE		
L1601	QQL244K-120Z	COIL	12μH	K
L1701	QQL244K-5R6Z	COIL	5.6μH	K
L1941-42	QQL42AK-820Z	COIL	82μH	K

DIODE

⚠	Symbol No.	Part No.	Part Name
	D1001	MTZJ33A-T2	ZENER DIODE
	D1101-02	1SS85-T2	SI.DIODE
	D1104	1SS133-T2	SI.DIODE
	D1203	1SS133-T2	SI.DIODE
	D1231-32	MTZJ13B-T2	ZENER DIODE
	D1421	1SS133-T2	SI.DIODE
	D1423	1SR124-400A-T2	SI.DIODE
	D1425	1SS133-T2	SI.DIODE
	D1501	MTZJ9.1B-T2	ZENER DIODE
	D1502	MTZJ5.1B-T2	ZENER DIODE
	D1551	RGP10J-5025-T3	SI.DIODE
	D1553	RH1S-T3	SI.DIODE
	D1582	RGP10J-5025-T3	SI.DIODE
	D1601	MTZJ6.8A-T2	ZENER DIODE
	D1602	MTZJ6.2B-T2	ZENER DIODE
	D1631	MTZJ6.2B-T2	ZENER DIODE
	D1633	MTZJ9.1C-T2	ZENER DIODE
	D1652	1SS133-T2	SI.DIODE
	D1701-03	1SS133-T2	SI.DIODE
	D1705	1SS133-T2	SI.DIODE
	D1706-09	MTZJ8.2B-T2	ZENER DIODE
	D1739	MTZJ8.2B-T2	ZENER DIODE
	D1751	SLR-342VR-T16	L.E.D.
	D1752	SLR-342DU-T16	L.E.D.(ORG)
⚠	D1901	D2SBA60	BRIDGE DIODE
	D1921-22	1SR124-400A-T2	SI.DIODE
	D1923	MTZJ15A-T2	ZENER DIODE
	D1924	1SR124-400A-T2	SI.DIODE
	D1926	RU1C-LFC4	SI.DIODE
	D1927	MTZJ6.8A-T2	ZENER DIODE
	D1928	1SS133-T2	SI.DIODE
	D1929	MTZJ15A-T2	ZENER DIODE
	D1941	RU3AM-LFC4	SI.DIODE
	D1942	RU3YX-LFC4	SI.DIODE
	D1943	RGP10J-5025-T3	SI.DIODE
	D1945	MTZJ6.2B-T2	ZENER DIODE
	D1971	1SR124-400A-T2	SI.DIODE
	D1981-84	1SS133-T2	SI.DIODE
	D1985	MTZJ12C-T2	ZENER DIODE

TRANSISTOR

Symbol No.	Part No.	Part Name
Q1101	2SC5083/L-P/-T	SI.TRANSISTOR
Q1102	DTC124ESA-T	DIGI.TRANSISTOR
Q1103	2SC1740S/QR/-T	SI.TRANSISTOR
Q1104	2SA933AS/QR/-T	SI.TRANSISTOR
Q1105-06	DTC124ESA-T	DIGI.TRANSISTOR
Q1107	2SC1740S/QR/-T	SI.TRANSISTOR
Q1108-09	2SA933AS/QR/-T	SI.TRANSISTOR
Q1110-11	DTC124ESA-T	DIGI.TRANSISTOR
Q1202	2SA933AS/QR/-T	SI.TRANSISTOR
Q1231	2SC1740S/QR/-T	SI.TRANSISTOR
Q1351-53	2SC2371/MLK/	SI.TRANSISTOR
Q1422-24	2SC1740S/QR/-T	SI.TRANSISTOR
Q1425	2SA933AS/QR/-T	SI.TRANSISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	TRANSISTOR				
	Q1521	BSN274	F.E.T.		
⚠	Q1522	2SD1878-YD	SI.TRANSISTOR	H.OUT	
	Q1523	2SC1815/YG/-T	SI.TRANSISTOR		
	Q1601-02	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1603	DTC124ESA-T	DIGI.TRANSISTOR		
	Q1604	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1605	DTC124ESA-T	DIGI.TRANSISTOR		
	Q1608	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1631	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1651	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1701	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q1702-03	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1751	DTA124ESA-T	DIGI.TRANSISTOR		
	Q1921	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q1941	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1942	DTC144GSA-T	DIGI.TRANSISTOR		
	Q1971	2SA966/OY/-T	SI.TRANSISTOR		
	Q1972	DTC144GSA-T	DIGI.TRANSISTOR		
	Q1981	2SA933AS/QR/-T	SI.TRANSISTOR		
	IC				
	IC1101	M52342SP	I.C.(MONO-ANA)		
	IC1201	TB1226EN	I.C.(DIGI-OTHER)		
	IC1421	LA7840	I.C.(MONO-ANA)		
	IC1651	AN5265	I.C.(MONO-ANA)		
	IC1701	M37212M8-050SP	I C		
	IC1702	AT24C04-K21M2L	I.C.	(SERVICE)	
	IC1703	L78LR05E-MA	I.C.(MONO-ANA)		
	IC1751	PIC-21043SR	IFR DETECT UNIT		
⚠	IC1921	STR-F6653	I.C.(HYBRID)		
⚠	IC1941	S1854A	I.C.(MONO-ANA)		
	IC1971	KIA7812PI	I.C.(MONO-ANA)		
	IC1972	KIA7809PI	I.C.(MONO-ANA)		
	IC1973	KIA7805PI	I.C.(MONO-ANA)		
	OTHERS				
		LC30114-001C-H	L.E.D.HOLDER		
	CF1102	MKT30.9MA100P	CERAMIC FILTER		
	CF1103	QAX0339-001	CERAMIC FILTER		
	CF1104	TPS5.5MW	CERAMIC FILTER		
	CF1105	TPS6.5MB	CERAMIC FILTER		
	CF1106	TPSH6.0MB	CERAMIC FILTER		
	CF1601	SFSH4.5MCB	CERAMIC FILTER		
	CF1604	QAX0336-001	CERAMIC FILTER		
	CF1606	QAX0337-001	CERAMIC FILTER		
	CF1608	QAX0338-001	CERAMIC FILTER		
⚠	CP1942	ICP-N75-Y	I.C.PROTECT		
⚠	CP1943	ICP-N25-Y	I.C.PROTECT		
⚠	CP1944	ICP-N5-Y	I.C.PROTECT		
	EF1201	CE42142-222Z	EMI FILTER		
⚠	F1901	QMF51E2-3R15J4	FUSE	3.15A	
	FC1901	CEMG002-001Z	FUSE CLIP		
⚠	FR1551	QRZ9017-4R7	F R	4.7 Ω 1/4W J	
⚠	FR1552	QRX029J-R47	MF R	0.47 Ω 2W J	
⚠	FR1554	QRZ9017-150	F R	15 Ω 1/4W J	
	J1001	CEMN075-001	PIN JACK		
	J1002	CEMN065-001	PIN JACK		
	J1004	CEMN065-002	PIN JACK		
	K1001	CE41433-001Z	BEADS CORE		
	K1201	CE41433-001Z	BEADS CORE		
	K1301	CE41433-001Z	BEADS CORE		
	K1422	CE41433-001Z	BEADS CORE		
	K1701-08	CE41433-001Z	BEADS CORE		
	K1921	CE41433-001Z	BEADS CORE		
	K1923	CE42050-001Z	CORE		
	K1941-43	CE42050-001Z	CORE		
⚠	LF1902	QQR0527-002	LINE FILTER		
⚠	PC1921	TLP721F(GR)	I.C.(PH.COUPLER)		
	S1401	QSL6A13-C01	LEVER SWITCH		
	S1751	QSP1A11-C18Z	PUSH SWITCH	CH PRESET	
	S1752	QSP1A11-C18Z	PUSH SWITCH	CH -	
	S1753	QSP1A11-C18Z	PUSH SWITCH	CH +	
	S1754	QSP1A11-C18Z	PUSH SWITCH	VOL -	
	S1755	QSP1A11-C18Z	PUSH SWITCH	VOL +	
⚠	S1901	QSP4K21-C01	PUSH SWITCH	POWER SW	
	SF1101	QAX0323-001	SAW FILTER		

⚠	Symbol No.	Part No.	Part Name	Description	Local
	OTHERS				
	SF1102	QAX0325-001	SAW FILTER		
⚠	SK1351	CE42446-001	C.R.T.SOCKET		
⚠	TH1901	CEKP010-001J2	W.P.THERMISTOR		
	TU1001	CEEU544-B03	VHF/UHF TUNER		
⚠	VA1901	ERZV10V621CS	VARISTOR		
	X1301	QAX0354-001	CRYSTAL		
	X1701	CST8.00MTW	CER.RESONATOR		

AV-K21M2(LB)

PRINTED WIRING BOARD PARTS LIST

MAIN PW BOARD ASS'Y (SCL-1220A-H2)

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1001-04	QRE141J-102Y	C R	1kΩ 1/4W	J
R1101	QRE141J-473Y	C R	47kΩ 1/4W	J
R1102	QRE141J-153Y	C R	15kΩ 1/4W	J
R1103	QRE141J-682Y	C R	6.8kΩ 1/4W	J
R1104	QRE141J-271Y	C R	270Ω 1/4W	J
R1105	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1106	QRE141J-122Y	C R	1.2kΩ 1/4W	J
R1107	QRE141J-680Y	C R	68Ω 1/4W	J
R1108	QRE141J-750Y	C R	75Ω 1/4W	J
R1110	QRE141J-182Y	C R	1.8kΩ 1/4W	J
R1111	QRE141J-101Y	C R	100Ω 1/4W	J
R1112	QRE141J-103Y	C R	10kΩ 1/4W	J
R1113-14	QRE141J-561Y	C R	560Ω 1/4W	J
R1116	QRE141J-104Y	C R	100kΩ 1/4W	J
R1117	QRE141J-272Y	C R	2.7kΩ 1/4W	J
R1118	QRE141J-273Y	C R	27kΩ 1/4W	J
R1119	QRE141J-224Y	C R	220kΩ 1/4W	J
R1120	QRE141J-822Y	C R	8.2kΩ 1/4W	J
R1123	QRE141J-151Y	C R	150Ω 1/4W	J
R1125	QRE141J-102Y	C R	1kΩ 1/4W	J
R1126	QRE141J-103Y	C R	10kΩ 1/4W	J
R1127	QRE141J-221Y	C R	220Ω 1/4W	J
R1128	QRE141J-681Y	C R	680Ω 1/4W	J
R1129	QRE141J-181Y	C R	180Ω 1/4W	J
R1130	QRE141J-102Y	C R	1kΩ 1/4W	J
R1131	QRE141J-271Y	C R	270Ω 1/4W	J
R1132-33	QRE141J-331Y	C R	330Ω 1/4W	J
R1135	QRE141J-224Y	C R	220kΩ 1/4W	J
R1203	QRE141J-224Y	C R	220kΩ 1/4W	J
R1204-05	QRE141J-391Y	C R	390Ω 1/4W	J
R1206	QRE141J-103Y	C R	10kΩ 1/4W	J
R1208	QRE141J-681Y	C R	680Ω 1/4W	J
R1209	QRE141J-821Y	C R	820Ω 1/4W	J
R1210	QRE141J-122Y	C R	1.2kΩ 1/4W	J
R1232	QRE141J-101Y	C R	100Ω 1/4W	J
R1233	QRE121J-101Y	C R	100Ω 1/2W	J
R1234	QRE141J-680Y	C R	68Ω 1/4W	J
R1235	QRE141J-750Y	C R	75Ω 1/4W	J
R1303	QRE141J-273Y	C R	27kΩ 1/4W	J
R1304-06	QRE141J-101Y	C R	100Ω 1/4W	J
R1307-10	QRE141J-102Y	C R	1kΩ 1/4W	J
R1311	QRE141J-333Y	C R	33kΩ 1/4W	J
R1314-15	QRE141J-101Y	C R	100Ω 1/4W	J
R1351-53	QRE141J-151Y	C R	150Ω 1/4W	J
R1354	QRL029J-123	OM R	12kΩ 2W	J
R1355	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1356	QRE141J-331Y	C R	330Ω 1/4W	J
R1357	QRL029J-123	OM R	12kΩ 2W	J
R1358	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1359	QRE141J-331Y	C R	330Ω 1/4W	J
R1360	QRL029J-123	OM R	12kΩ 2W	J
R1361	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1362	QRE141J-331Y	C R	330Ω 1/4W	J
R1363	QRZ0107-152Z	C R	1.5kΩ 1/2W	K
R1364	QRE141J-182Y	C R	1.8kΩ 1/4W	J
R1365	QRE141J-101Y	C R	100Ω 1/4W	J
R1366	QRZ0107-152Z	C R	1.5kΩ 1/2W	K
R1367	QRE141J-101Y	C R	100Ω 1/4W	J
R1368	QRZ0107-152Z	C R	1.5kΩ 1/2W	K
R1369	QRE141J-101Y	C R	100Ω 1/4W	J
R1372	QRE141J-152Y	C R	1.5kΩ 1/4W	J
R1403	QRE141J-682Y	C R	6.8kΩ 1/4W	J
R1422	QRE141J-472Y	C R	4.7kΩ 1/4W	J
R1423	QRE141J-221Y	C R	220Ω 1/4W	J
R1425-26	QRE141J-333Y	C R	33kΩ 1/4W	J
R1427	QRE141J-103Y	C R	10kΩ 1/4W	J

⚠ Symbol No.	Part No.	Part Name	Description	Local
RESISTOR				
R1429	QRE141J-562Y	C R	5.6kΩ 1/4W	J
R1430	QRE141J-103Y	C R	10kΩ 1/4W	J
R1431	QRE141J-822Y	C R	8.2kΩ 1/4W	J
R1432-33	QRE121J-4R7Y	C R	4.7Ω 1/2W	J
R1440	QRE121J-331Y	C R	330Ω 1/2W	J
R1441	QRE141J-682Y	C R	6.8kΩ 1/4W	J
R1442	QRE141J-822Y	C R	8.2kΩ 1/4W	J
R1443	QRE121J-1R0Y	C R	1.0Ω 1/2W	J
R1444	QRE121J-681Y	C R	680Ω 1/2W	J
R1445	QRE121J-182Y	C R	1.8kΩ 1/2W	J
R1450	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1451	QRE141J-103Y	C R	10kΩ 1/4W	J
R1453	QRE141J-122Y	C R	1.2kΩ 1/4W	J
R1501	QRE141J-822Y	C R	8.2kΩ 1/4W	J
R1502	QRE141J-621Y	C R	620Ω 1/4W	J
R1504	QRE141J-103Y	C R	10kΩ 1/4W	J
R1505	QRE141J-104Y	C R	100kΩ 1/4W	J
R1506	QRG01GJ-121	OM R	120Ω 1W	J
R1522	QRE141J-123Y	C R	12kΩ 1/4W	J
R1523	QRE121J-222Y	C R	2.2kΩ 1/2W	J
R1524	QRG029J-222	OM R	2.2kΩ 2W	J
R1525	QRG029J-272	OM R	2.7kΩ 2W	J
R1526	QRE121J-220Y	C R	22Ω 1/2W	J
R1529	QRG029J-391	OM R	390 Ω 2W	J
R1582	QRE141J-153Y	C R	15kΩ 1/4W	J
R1583	QRE141J-123Y	C R	12kΩ 1/4W	J
R1591	QRE141J-273Y	C R	27kΩ 1/4W	J
R1594	QRE141J-332Y	C R	3.3kΩ 1/4W	J
R1601	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1602	QRE141J-332Y	C R	3.3kΩ 1/4W	J
R1603	QRE141J-103Y	C R	10kΩ 1/4W	J
R1604	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1605	QRE141J-221Y	C R	220Ω 1/4W	J
R1606	QRE141J-152Y	C R	1.5kΩ 1/4W	J
R1607	QRE141J-182Y	C R	1.8kΩ 1/4W	J
R1608	QRE141J-561Y	C R	560Ω 1/4W	J
R1609	QRE141J-471Y	C R	470Ω 1/4W	J
R1610	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1611	QRE141J-152Y	C R	1.5kΩ 1/4W	J
R1612	QRE141J-471Y	C R	470Ω 1/4W	J
R1615	QRE141J-181Y	C R	180Ω 1/4W	J
R1616	QRE141J-220Y	C R	22Ω 1/4W	J
R1617	QRE141J-821Y	C R	820Ω 1/4W	J
R1621	QRE141J-393Y	C R	39kΩ 1/4W	J
R1622	QRE141J-103Y	C R	10kΩ 1/4W	J
R1623	QRE141J-391Y	C R	390Ω 1/4W	J
R1624	QRE141J-101Y	C R	100Ω 1/4W	J
R1625	QRE141J-561Y	C R	560Ω 1/4W	J
R1626	QRE141J-182Y	C R	1.8kΩ 1/4W	J
R1627-28	QRE141J-561Y	C R	560Ω 1/4W	J
R1631	QRE141J-681Y	C R	680Ω 1/4W	J
R1632	QRE141J-181Y	C R	180Ω 1/4W	J
R1634	QRE141J-472Y	C R	4.7kΩ 1/4W	J
R1636	QRE141J-473Y	C R	47kΩ 1/4W	J
R1637	QRE141J-393Y	C R	39kΩ 1/4W	J
R1638	QRE141J-102Y	C R	1kΩ 1/4W	J
R1653	QRE141J-183Y	C R	18kΩ 1/4W	J
R1654	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1655	QRE141J-822Y	C R	8.2kΩ 1/4W	J
R1656	QRE141J-101Y	C R	100Ω 1/4W	J
R1657	QRE141J-393Y	C R	39kΩ 1/4W	J
R1658	QRE141J-103Y	C R	10kΩ 1/4W	J
R1659	QRE141J-153Y	C R	15kΩ 1/4W	J
R1660	QRE141J-331Y	C R	330Ω 1/4W	J
R1661	QRE121J-4R7Y	C R	4.7Ω 1/2W	J
R1662	QRE141J-102Y	C R	1kΩ 1/4W	J

⚠	Symbol No.	Part No.	Part Name	Description	Local
	RESISTOR				
	R1663	QRE141J-472Y	C R	4.7kΩ 1/4W	J
	R1664	QRX01GJ-2R7	MF R	2.7Ω 1W	J
	R1701	QRE141J-473Y	C R	47kΩ 1/4W	J
	R1702	QRB089J-682	NETW.R	6.8kΩ	
	R1703	QRE141J-682Y	C R	6.8kΩ 1/4W	J
	R1704-05	QRE141J-561Y	C R	560Ω 1/4W	J
	R1706	QRE141J-821Y	C R	820Ω 1/4W	J
	R1707-08	QRE141J-103Y	C R	10kΩ 1/4W	J
	R1709	QRE141J-223Y	C R	22kΩ 1/4W	J
	R1710	QRE141J-682Y	C R	6.8kΩ 1/4W	J
	R1711	QRE141J-103Y	C R	10kΩ 1/4W	J
	R1712	QRE141J-563Y	C R	56kΩ 1/4W	J
	R1713	QRE141J-223Y	C R	22kΩ 1/4W	J
	R1714	QRE141J-103Y	C R	10kΩ 1/4W	J
	R1719-22	QRE141J-562Y	C R	5.6kΩ 1/4W	J
	R1724	QRE141J-682Y	C R	6.8kΩ 1/4W	J
	R1725	QRB089J-682	NETW.R	6.8kΩ	
	R1728	QRE141J-682Y	C R	6.8kΩ 1/4W	J
	R1733-36	QRE141J-221Y	C R	220Ω 1/4W	J
	R1737	QRE141J-124Y	C R	120kΩ 1/4W	J
	R1738	QRE141J-683Y	C R	68kΩ 1/4W	J
	R1739	QRE141J-103Y	C R	10kΩ 1/4W	J
	R1740-44	QRE141J-221Y	C R	220Ω 1/4W	J
	R1746	QRE141J-473Y	C R	47kΩ 1/4W	J
	R1747-48	QRE141J-682Y	C R	6.8kΩ 1/4W	J
	R1751	QRE141J-103Y	C R	10kΩ 1/4W	J
	R1752	QRE141J-332Y	C R	3.3kΩ 1/4W	J
	R1753	QRE141J-682Y	C R	6.8kΩ 1/4W	J
	R1754	QRE141J-103Y	C R	10kΩ 1/4W	J
	R1755	QRE141J-332Y	C R	3.3kΩ 1/4W	J
	R1756-57	QRE141J-681Y	C R	680Ω 1/4W	J
	R1815	QRE141J-103Y	C R	10kΩ 1/4W	J
⚠	R1901	QRF104K-3R9	UNF R	3.9Ω 10W	K
	R1902	QRL039J-683	OM R	68kΩ 3W	J
	R1921	QRE121J-681Y	C R	680Ω 1/2W	J
	R1922	QRX029J-1R5	MF R	1.5Ω 2W	J
	R1923	QRM059J-R27	MP R	0.27 Ω 5W	J
	R1924	QRE121J-103Y	C R	10kΩ 1/2W	J
	R1925	QRE121J-102Y	C R	1kΩ 1/2W	J
	R1926	QRE121J-272Y	C R	2.7kΩ 1/2W	J
	R1927	QRE121J-103Y	C R	10kΩ 1/2W	J
	R1928	QRG029J-473	OM R	47kΩ 2W	J
	R1929	QRE121J-332Y	C R	3.3kΩ 1/2W	J
	R1932	QRE121J-824Y	C R	820kΩ 1/2W	J
⚠	R1933	QRZ9017-3R3	FUSI.R	3.3 Ω 1/4W	J
	R1934	QRE121J-393Y	C R	39kΩ 1/2W	J
	R1935	QRE121J-272Y	C R	2.7kΩ 1/2W	J
	R1941	QRE121J-152Y	C R	1.5kΩ 1/2W	J
	R1943	QRE141J-472Y	C R	4.7kΩ 1/4W	J
	R1944	QRE121J-332Y	C R	3.3kΩ 1/2W	J
	R1946	QRE141J-153Y	C R	15kΩ 1/4W	J
	R1970	QRG01GJ-150	OM R	15Ω 1W	J
	R1971	QRE121J-223Y	C R	22kΩ 1/2W	J
	R1972	QRE121J-152Y	C R	1.5kΩ 1/2W	J
	R1973	QRL029J-270	OM R	27Ω 2W	J
	R1974	QRE141J-222Y	C R	2.2kΩ 1/4W	J
	R1975	QRE141J-123Y	C R	12kΩ 1/4W	J
	R1976	QRJ146J-680X	C R	68Ω 1/4W	J
	R1977	QRG029J-183	OM R	18kΩ 2W	J
	R1979	QRL029J-270	OM R	27Ω 2W	J
	R1980	QRE141J-821Y	C R	820Ω 1/4W	J
	R1981	QRE141J-222Y	C R	2.2kΩ 1/4W	J
	R1982	QRE141J-822Y	C R	8.2kΩ 1/4W	J
	R1983	QRE141J-102Y	C R	1kΩ 1/4W	J
	R1984	QRE141J-822Y	C R	8.2kΩ 1/4W	J
⚠	R1991	QRZ0057-825	C R	8.2MΩ 1W	J
	CAPACITOR				
	C1001	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C1002	QETN1CM-108Z	E CAP.	1000µF 16V	M
	C1003	QETN1HM-106Z	E CAP.	10µF 50V	M

⚠	Symbol No.	Part No.	Part Name	Description	Local
	CAPACITOR				
	C1004	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1005-07	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1015	QCB31HK-222Z	C CAP.	2200pF 50V	K
	C1016	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
	C1101-07	QCB31HK-472Z	C CAP.	4700pF 50V	K
	C1108	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1110-11	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1112	QFLC1HJ-104Z	M CAP.	0.1µF 50V	J
	C1113	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1114	QETN1HM-474Z	E CAP.	0.47µF 50V	M
	C1116	QETN1HM-474Z	E CAP.	0.47µF 50V	M
	C1118	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1119-20	QETN1CM-476Z	E CAP.	47µF 16V	M
	C1121	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1122	QETN1CM-476Z	E CAP.	47µF 16V	M
	C1123	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1124	QETN1CM-476Z	E CAP.	47µF 16V	M
	C1135	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1136	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
	C1201	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1202	QFLC1HJ-104Z	M CAP.	0.1µF 50V	J
	C1203	QETN1HM-105Z	E CAP.	1µF 50V	M
	C1204	QFLC1HJ-104Z	M CAP.	0.1µF 50V	J
	C1205	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C1206	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1207	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1208	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1209	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1210	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1212	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1213	QEN61CM-106Z	BP E CAP.	10µF 16V	M
	C1231	QETN1CM-227Z	E CAP.	220µF 16V	M
	C1232	QETN1CM-477Z	E CAP.	470µF 16V	M
	C1253	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1301	QFLC1HJ-473Z	M CAP.	0.047µF 50V	J
	C1302	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1303	QDC31HJ-120Z	C CAP.	12pF 50V	J
	C1304-06	QFLC1HJ-104Z	M CAP.	0.1µF 50V	J
	C1307	QETN1HM-225Z	E CAP.	2.2µF 50V	M
	C1308	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1309	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C1310	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1311	QETN1AM-107Z	E CAP.	100µF 10V	M
	C1312	QETN1CM-227Z	E CAP.	220µF 16V	M
	C1313	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1316	QCS31HJ-101Z	C CAP.	100pF 50V	J
	C1320	QCS31HJ-101Z	C CAP.	100pF 50V	J
	C1351	QETN1AM-477Z	E CAP.	470µF 10V	M
	C1353	QCB31HK-331Z	C CAP.	330pF 50V	K
	C1355	QCB31HK-331Z	C CAP.	330pF 50V	K
	C1357	QCB31HK-391Z	C CAP.	390pF 50V	K
	C1359	QFZ0097-103	MM CAP.	0.01µF 1250V	K
	C1360	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
	C1402	QEM61HK-225Z	E CAP.	2.2µF 50V	K
	C1405	QETN1HM-105Z	E CAP.	1µF 50V	M
	C1422	QFN31HJ-182Z	M CAP.	1800pF 50V	J
	C1423	QFLC2AJ-473Z	M CAP.	0.047µF 100V	J
	C1427-28	QETN1VM-107Z	E CAP.	100µF 35V	M
	C1430	QFLC2AJ-103Z	M CAP.	0.01µF 100V	J
	C1433	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C1435	QETM1EM-108	E CAP.	1000µF 25V	M
	C1436	QFV71HJ-334Z	MF CAP.	0.33µF 50V	J
	C1437	QFN31HJ-102Z	M CAP.	1000pF 50V	J
	C1450	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1501	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1502	QETN1HM-105Z	E CAP.	1µF 50V	M
	C1503	QETN1AM-108Z	E CAP.	1000µF 10V	M
	C1504-06	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1507	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
	C1508	QETN1CM-476Z	E CAP.	47µF 16V	M
	C1509-10	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1521	QCB32HK-151Z	C CAP.	150pF 500V	K

CAPACITOR

Symbol No.	Part No.	Part Name	Description	Local
C1522	QCB32HK-102Z	C CAP.	1000pF 500V	K
C1523	QEHC2CM-105Z	E CAP.	1μF 160V	M
⚠ C1524	QFZ0117-1102	MPP CAP.	0.011μF1.4kVH±2.5%	
⚠ C1527	QFZ0151-514	MPP CAP.	0.51μF 200V ±3%	
C1552	QETM1EM-108	E CAP.	1000μF 25V	M
C1557	QETN2EM-225Z	E CAP.	2.2μF 250V	M
C1571	QEHB2CM-476	E CAP.	47μF 160V	M
C1581	QFLC1HJ-104Z	M CAP.	0.1μF 50V	J
C1591	QETN1AM-227Z	E CAP.	220μF 10V	M
C1601	QETN1HM-106Z	E CAP.	10μF 50V	M
C1602	QFLC1HJ-103Z	M CAP.	0.01μF 50V	J
C1603	QCS31HJ-470Z	C CAP.	47pF 50V	J
C1604	QDC31HJ-470Z	C CAP.	47pF 50V	J
C1606	QCB31HK-103Z	C CAP.	0.01μF 50V	K
C1607	QETN1CM-107Z	E CAP.	100μF 16V	M
C1608-12	QCB31HK-103Z	C CAP.	0.01μF 50V	K
C1631-32	QETN1HM-106Z	E CAP.	10μF 50V	M
C1651	QETN1CM-107Z	E CAP.	100μF 16V	M
C1652	QFN31HJ-102Z	M CAP.	1000pF 50V	J
C1653	QENC1HM-105Z	BP E CAP.	1μF 50V	M
C1656	QETN1HM-106Z	E CAP.	10μF 50V	M
C1657	QETN1CM-227Z	E CAP.	220μF 16V	M
C1659	QFLC1HJ-473Z	M CAP.	0.047μF 50V	J
C1661-62	QETN1HM-475Z	E CAP.	4.7μF 50V	M
C1663	QETN1EM-227Z	E CAP.	220μF 25V	M
C1701	QETN1CM-107Z	E CAP.	100μF 16V	M
C1702	QFLC1HJ-104Z	M CAP.	0.1μF 50V	J
C1703	QETN1CM-476Z	E CAP.	47μF 16V	M
C1704	QFN31HJ-102Z	M CAP.	1000pF 50V	J
C1705	QETN1AM-107Z	E CAP.	100μF 10V	M
C1707	QCB31HK-272Z	C CAP.	2700pF 50V	K
C1708	QFN31HJ-222Z	M CAP.	2200pF 50V	J
C1709	QCS31HJ-560Z	C CAP.	56pF 50V	J
C1710	QCB31HK-103Z	C CAP.	0.01μF 50V	K
C1711	QFLC1HJ-104Z	M CAP.	0.1μF 50V	J
C1712	QETN1HM-106Z	E CAP.	10μF 50V	M
C1713	QCS31HJ-181Z	C CAP.	180pF 50V	J
C1714	QFLC1HJ-103Z	M CAP.	0.01μF 50V	J
C1715	QFLC1HJ-473Z	M CAP.	0.047μF 50V	J
C1721	QETN1HM-106Z	E CAP.	10μF 50V	M
C1723-27	QCS31HJ-181Z	C CAP.	180pF 50V	J
C1728-30	QFLC1HJ-103Z	M CAP.	0.01μF 50V	J
C1751	QETN1CM-476Z	E CAP.	47μF 16V	M
⚠ C1902	QFZ9040-104	MF CAP.	0.1μFAC275V	M
⚠ C1904	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠ C1905	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠ C1906	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠ C1907	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠ C1909	QEZ0199-127	E CAP.	120μF 400V	M
⚠ C1910	QFZ9040-473	MF CAP.	0.047μFAC275V	M
C1921	QCZ0325-102	C CAP.	1000pF 2kV	K
C1922	QFN31HJ-102Z	M CAP.	1000pF 50V	J
C1924	QETN1EM-107Z	E CAP.	100μF 25V	M
C1925	QFN31HJ-102Z	M CAP.	1000pF 50V	J
C1926	QFN31HJ-222Z	M CAP.	2200pF 50V	J
C1929	QCB32HK-103	C CAP.	0.01μF 500V	K
C1930	QCZ0122-151	C CAP.	150pF 2kV	K
C1931	QCZ0122-271	C CAP.	270pF 2kV	K
C1941	QCZ0122-561	C CAP.	560pF 2kV	K
C1942	QEZ0203-107	E CAP.	100μF 160V	M
C1944	QCB32HK-561Z	C CAP.	560pF 500V	K
C1945	QETN1CM-108Z	E CAP.	1000μF 16V	M
C1947	QCB32HK-561Z	C CAP.	560pF 500V	K
C1948	QETN1EM-477Z	E CAP.	470μF 25V	M
C1949	QCB31HK-222Z	C CAP.	2200pF 50V	K
C1950	QFLC1HJ-104Z	M CAP.	0.1μF 50V	J
C1971	QETN1HM-106Z	E CAP.	10μF 50V	M
C1972	QETN1EM-477Z	E CAP.	470μF 25V	M
C1974	QETM1EM-108	E CAP.	1000μF 25V	M
C1975	QETN1EM-107Z	E CAP.	100μF 25V	M
C1976-77	QETN1CM-107Z	E CAP.	100μF 16V	M
C1978	QETN1AM-107Z	E CAP.	100μF 10V	M
⚠ C1991	QCZ9079-471	C CAP.	470pFAC250V	K
⚠ C1992	QCZ9079-471	C CAP.	470pFAC250V	K
⚠ C1993	QCZ9079-222	C CAP.	2200pFAC250V	M

TRANSFORMER

Symbol No.	Part No.	Part Name	Description	Local
T1101	CELT001-303J3	C.WAVE TRANSF.		
T1521	CE42034-001	H.DRIVE TRANSF.		
⚠ T1522	QQH0021-001	FLYBACK TRANSF.		
⚠ T1921	CETS093-001JF	SWITCH.TRANSF.		

COIL

Symbol No.	Part No.	Part Name	Description	Local
L1001	QQL244K-8R2Z	COIL	8.2μH	K
L1104	QQL244K-150Z	COIL	15μH	K
L1105	QQL244K-8R2Z	COIL	8.2μH	K
L1106	QQL244K-100Z	COIL	10μH	K
L1301-02	QQL244K-470Z	COIL	47μH	K
L1303	QQL244K-4R7Z	COIL	4.7μH	K
L1351-53	QQL244K-820Z	COIL	82μH	K
L1551	QQLZ018-540	HEATER CHOKE		
L1601	QQL244K-120Z	COIL	12μH	K
L1701	QQL244K-5R6Z	COIL	5.6μH	K
L1941-42	QQL42AK-820Z	COIL	82μH	K

DIODE

Symbol No.	Part No.	Part Name
D1001	MTZJ33A-T2	ZENER DIODE
D1101-02	1SS85-T2	SI.DIODE
D1104	1SS133-T2	SI.DIODE
D1203	1SS133-T2	SI.DIODE
D1231-32	MTZJ13B-T2	ZENER DIODE
D1421	1SS133-T2	SI.DIODE
D1423	1SR124-400A-T2	SI.DIODE
D1425	1SS133-T2	SI.DIODE
D1501	MTZJ9.1B-T2	ZENER DIODE
D1502	MTZJ5.1B-T2	ZENER DIODE
D1551	RGP10J-5025-T3	SI.DIODE
D1553	RH1S-T3	SI.DIODE
D1582	RGP10J-5025-T3	SI.DIODE
D1601	MTZJ6.8A-T2	ZENER DIODE
D1602	MTZJ6.2B-T2	ZENER DIODE
D1631	MTZJ6.2B-T2	ZENER DIODE
D1633	MTZJ9.1C-T2	ZENER DIODE
D1652	1SS133-T2	SI.DIODE
D1701-03	1SS133-T2	SI.DIODE
D1705	1SS133-T2	SI.DIODE
D1706-09	MTZJ8.2B-T2	ZENER DIODE
D1739	MTZJ8.2B-T2	ZENER DIODE
D1751	SLR-342VR-T16	L.E.D.
D1752	SLR-342DU-T16	L.E.D.(ORG)
⚠ D1901	D2SBA60	BRIDGE DIODE
D1921-22	1SR124-400A-T2	SI.DIODE
D1923	MTZJ15A-T2	ZENER DIODE
D1924	1SR124-400A-T2	SI.DIODE
D1926	RU1C-LFC4	SI.DIODE
D1927	MTZJ6.8A-T2	ZENER DIODE
D1928	1SS133-T2	SI.DIODE
D1929	MTZJ15A-T2	ZENER DIODE
D1941	RU3AM-LFC4	SI.DIODE
D1942	RU3YX-LFC4	SI.DIODE
D1943	RGP10J-5025-T3	SI.DIODE
D1945	MTZJ6.2B-T2	ZENER DIODE
D1971	1SR124-400A-T2	SI.DIODE
D1981-84	1SS133-T2	SI.DIODE
D1985	MTZJ12C-T2	ZENER DIODE

TRANSISTOR

Symbol No.	Part No.	Part Name
Q1101	2SC5083/L-P/-T	SI.TRANSISTOR
Q1102	DTC124ESA-T	DIGI.TRANSISTOR
Q1103	2SC1740S/QR/-T	SI.TRANSISTOR
Q1104	2SA933AS/QR/-T	SI.TRANSISTOR
Q1105-06	DTC124ESA-T	DIGI.TRANSISTOR
Q1107	2SC1740S/QR/-T	SI.TRANSISTOR
Q1108-09	2SA933AS/QR/-T	SI.TRANSISTOR
Q1110-11	DTC124ESA-T	DIGI.TRANSISTOR
Q1202	2SA933AS/QR/-T	SI.TRANSISTOR
Q1231	2SC1740S/QR/-T	SI.TRANSISTOR
Q1351-53	2SC2371/MLK/	SI.TRANSISTOR
Q1422-24	2SC1740S/QR/-T	SI.TRANSISTOR
Q1425	2SA933AS/QR/-T	SI.TRANSISTOR
Q1521	BSN274	F.E.T.

⚠	Symbol No.	Part No.	Part Name	Description	Local
	TRANSISTOR				
⚠	Q1522	2SD1878-YD	SI.TRANSISTOR	H.OUT	
	Q1523	2SC1815/YG/-T	SI.TRANSISTOR		
	Q1601-02	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1603	DTC124ESA-T	DIGI.TRANSISTOR		
	Q1604	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1605	DTC124ESA-T	DIGI.TRANSISTOR		
	Q1608	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1631	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1651	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1701	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q1702-03	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1751	DTA124ESA-T	DIGI.TRANSISTOR		
	Q1921	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q1941	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1942	DTC144GSA-T	DIGI.TRANSISTOR		
	Q1971	2SA966/OY/-T	SI.TRANSISTOR		
	Q1972	DTC144GSA-T	DIGI.TRANSISTOR		
	Q1981	2SA933AS/QR/-T	SI.TRANSISTOR		
	IC				
	IC1101	M52342SP	I.C.(MONO-ANA)		
	IC1201	TB1226EN	I.C.(DIGI-OTHER)		
	IC1421	LA7840	I.C.(MONO-ANA)		
	IC1651	AN5265	I.C.(MONO-ANA)		
	IC1701	M37212M8-050SP	I C		
	IC1702	AT24C04-K21M2L	I.C.	(SERVICE)	
	IC1703	L78LR05E-MA	I.C.(MONO-ANA)		
	IC1751	PIC-21043SR	IFR DETECT UNIT		
⚠	IC1921	STR-F6653	I.C.(HYBRID)		
⚠	IC1941	S1854A	I.C.(MONO-ANA)		
	IC1971	BA17812T	I C		
	IC1972	BA17809T	I.C(MONO-ANA)		
	IC1973	BA17805T	I C		
	OTHERS				
		LC30114-001C-H	L.E.D.HOLDER		
	CF1102	MKT30.9MA100P	CERAMIC FILTER		
	CF1103	QAX0339-001	CERAMIC FILTER		
	CF1104	TPS5.5MW	CERAMIC FILTER		
	CF1105	TPS6.5MB	CERAMIC FILTER		
	CF1106	TPSH6.0MB	CERAMIC FILTER		
	CF1601	SFSH4.5MCB	CERAMIC FILTER		
	CF1604	QAX0336-001	CERAMIC FILTER		
	CF1606	QAX0337-001	CERAMIC FILTER		
	CF1608	QAX0338-001	CERAMIC FILTER		
⚠	CP1942	ICP-N75-Y	I.C.PROTECT		
⚠	CP1943	ICP-N25-Y	I.C.PROTECT		
⚠	CP1944	ICP-N5-Y	I.C.PROTECT		
	EF1201	CE42142-222Z	EMI FILTER		
⚠	F1901	QMF51E2-3R15J4	FUSE	3.15A	
	FC1901	CEMG002-001Z	FUSE CLIP		
⚠	FR1551	QRZ9017-4R7	F R	4.7 Ω 1/4W J	
⚠	FR1552	QRX029J-R47	MF R	0.47 Ω 2W J	
⚠	FR1554	QRZ9017-150	F R	15 Ω 1/4W J	
	J1001	CEMN075-001	PIN JACK		
	J1002	CEMN065-001	PIN JACK		
	J1004	CEMN065-002	PIN JACK		
	K1001	CE41433-001Z	BEADS CORE		
	K1201	CE41433-001Z	BEADS CORE		
	K1301	CE41433-001Z	BEADS CORE		
	K1422	CE41433-001Z	BEADS CORE		
	K1701-08	CE41433-001Z	BEADS CORE		
	K1921	CE41433-001Z	BEADS CORE		
	K1923	CE42050-001Z	CORE		
	K1941-43	CE42050-001Z	CORE		
⚠	LF1902	QQR0527-002	LINE FILTER		
⚠	PC1921	TLP721F(D4-GR)	I.C.(PH.COUPLER)		
	S1401	QSL6A13-C01	LEVER SWITCH		
	S1751	QSP1A11-C18Z	PUSH SWITCH	CH PRESET	
	S1752	QSP1A11-C18Z	PUSH SWITCH	CH -	
	S1753	QSP1A11-C18Z	PUSH SWITCH	CH +	
	S1754	QSP1A11-C18Z	PUSH SWITCH	VOL -	
	S1755	QSP1A11-C18Z	PUSH SWITCH	VOL +	
⚠	S1901	QSP4K21-C01	PUSH SWITCH	POWER SW	
	SF1101	QAX0323-001	SAW FILTER		

⚠	Symbol No.	Part No.	Part Name	Description	Local
	OTHERS				
	SF1102	QAX0325-001	SAW FILTER		
⚠	SK1351	CE42446-001	C.R.T.SOCKET		
⚠	TH1901	CEKP010-001J2	W.P.THERMISTOR		
	TU1001	CEEM574-B01	TUNER		
⚠	VA1901	ERZV10V621CS	VARISTOR		
	X1301	QAX0354-001	CRYSTAL		
	X1701	CST8.00MTW	CER.RESONATOR		

⚠	Symbol No.	Part No.	Part Name	Description	Local
	CAPACITOR				
	C1663	QETC1EM-227Z	E CAP.	220µF 25V	M
	C1701	QETC1CM-107Z	E CAP.	100µF 16V	M
	C1702	QFLC1HJ-104Z	M CAP.	0.1µF 50V	J
	C1703	QETC1CM-476Z	E CAP.	47µF 16V	M
	C1704	QFN31HJ-102Z	M CAP.	1000pF 50V	J
	C1705	QETC1AM-107Z	E CAP.	100µF 10V	M
	C1707	QCB31HK-272Z	C CAP.	2700pF 50V	K
	C1708	QFN31HJ-222Z	M CAP.	2200pF 50V	J
	C1709	QCS31HJ-560Z	C CAP.	56pF 50V	J
	C1710	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1711	QFLC1HJ-104Z	M CAP.	0.1µF 50V	J
	C1712	QETC1HM-106Z	E CAP.	10µF 50V	M
	C1713	QCS31HJ-181Z	C CAP.	180pF 50V	J
	C1714	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
	C1715	QFLC1HJ-473Z	M CAP.	0.047µF 50V	J
	C1721	QETC1HM-106Z	E CAP.	10µF 50V	M
	C1723-27	QCS31HJ-181Z	C CAP.	180pF 50V	J
	C1728-30	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
	C1751	QETC1CM-476Z	E CAP.	47µF 16V	M
⚠	C1902	QFZ9040-104	MF CAP.	0.1µFAC275V	M
⚠	C1904	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠	C1905	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠	C1906	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠	C1907	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠	C1909	QEZ0199-127	E CAP.	120µF 400V	M
⚠	C1910	QFZ9040-473	MF CAP.	0.047µFAC275V	M
	C1921	QCZ0325-102	C CAP.	1000pF 2kV	K
	C1922	QFN31HJ-102Z	M CAP.	1000pF 50V	J
	C1924	QETC1EM-107Z	E CAP.	100µF 25V	M
	C1925	QFN31HJ-102Z	M CAP.	1000pF 50V	J
	C1926	QFN31HJ-222Z	M CAP.	2200pF 50V	J
	C1929	QCB32HK-103	C CAP.	0.01µF 500V	K
	C1930	QCZ0122-151	C CAP.	150pF 2kV	K
	C1931	QCZ0122-271	C CAP.	270PF 2kV	K
	C1941	QCZ0122-561	C CAP.	560pF 2kV	K
	C1942	QEZ0203-107	E CAP.	100µF 160V	M
	C1944	QCB32HK-561Z	C CAP.	560pF 500V	K
	C1945	QETC1CM-108Z	E CAP.	1000µF 16V	M
	C1947	QCB32HK-561Z	C CAP.	560pF 500V	K
	C1948	QETC1EM-477Z	E CAP.	470µF 25V	M
	C1949	QCB31HK-222Z	C CAP.	2200pF 50V	K
	C1950	QFLC1HJ-104Z	M CAP.	0.1µF 50V	J
	C1971	QETC1HM-106Z	E CAP.	10µF 50V	M
	C1972	QETC1EM-477Z	E CAP.	470µF 25V	M
	C1974	QETM1EM-108	E CAP.	1000µF 25V	M
	C1975	QETC1EM-107Z	E CAP.	100µF 25V	M
	C1976-77	QETC1CM-107Z	E CAP.	100µF 16V	M
	C1978	QETC1AM-107Z	E CAP.	100µF 10V	M
⚠	C1991	QCZ9079-471	C CAP.	470pFAC250V	K
⚠	C1992	QCZ9079-471	C CAP.	470pFAC250V	K
⚠	C1993	QCZ9079-222	C CAP.	2200pFAC250V	M
	TRANSFORMER				
	T1101	CELT001-303J3	C.WAVE TRANSF.		
	T1521	CE42034-001	H.DRIVE TRANSF.		
⚠	T1522	QQH0021-001	FLYBACK TRANSF.		
⚠	T1921	CETS093-001JF	SWITCH.TRANSF.		
	COIL				
	L1001	QQL244K-8R2Z	COIL	8.2µH	K
	L1105	QQL244K-8R2Z	COIL	8.2µH	K
	L1106	QQL244K-100Z	COIL	10µH	K
	L1301-02	QQL244K-470Z	COIL	47µH	K
	L1303	QQL244K-4R7Z	COIL	4.7µH	K
	L1351-53	QQL244K-820Z	COIL	82µH	K
	L1551	QQLZ018-460	HEATER CHOKE		
	L1701	QQL244K-5R6Z	COIL	5.6µH	K
	L1941-42	QQL42AK-820Z	COIL	82µH	K
	DIODE				
	D1001	MTZJ33A-T2	ZENER DIODE		
	D1203	1SS133-T2	SI.DIODE		

⚠	Symbol No.	Part No.	Part Name	Description	Local
	DIODE				
	D1231-32	MTZJ13B-T2	ZENER DIODE		
	D1421	1SS133-T2	SI.DIODE		
	D1423	1SR124-400A-T2	SI.DIODE		
	D1425	1SS133-T2	SI.DIODE		
	D1501	MTZJ9.1B-T2	ZENER DIODE		
	D1502	MTZJ5.1B-T2	ZENER DIODE		
	D1551	RGP10J-5025-T3	SI.DIODE		
	D1553	RH1S-T3	SI.DIODE		
	D1582	RGP10J-5025-T3	SI.DIODE		
	D1601	MTZJ6.8A-T2	ZENER DIODE		
	D1602	MTZJ6.2B-T2	ZENER DIODE		
	D1631	MTZJ6.2B-T2	ZENER DIODE		
	D1633	MTZJ9.1C-T2	ZENER DIODE		
	D1652	1SS133-T2	SI.DIODE		
	D1701-03	1SS133-T2	SI.DIODE		
	D1705	1SS133-T2	SI.DIODE		
	D1706-09	MTZJ8.2B-T2	ZENER DIODE		
	D1739	MTZJ8.2B-T2	ZENER DIODE		
	D1751	SLR-342VR-T16	L.E.D.		
	D1752	SLR-342DU-T16	L.E.D.(ORG)		
⚠	D1901	D2SBA60	BRIDGE DIODE		
	D1921-22	1SR124-400A-T2	SI.DIODE		
	D1923	MTZJ15A-T2	ZENER DIODE		
	D1924	1SR124-400A-T2	SI.DIODE		
	D1926	RU1C-LFC4	SI.DIODE		
	D1927	MTZJ6.8A-T2	ZENER DIODE		
	D1928	1SS133-T2	SI.DIODE		
	D1929	MTZJ15A-T2	ZENER DIODE		
	D1941	RU3AM-LFC4	SI.DIODE		
	D1942	RU3YX-LFC4	SI.DIODE		
	D1943	RGP10J-5025-T3	SI.DIODE		
	D1945	MTZJ6.2B-T2	ZENER DIODE		
	D1971	1SR124-400A-T2	SI.DIODE		
	D1981-84	1SS133-T2	SI.DIODE		
	D1985	MTZJ12C-T2	ZENER DIODE		
	TRANSISTOR				
	Q1101	2SC5083/L-P/-T	SI.TRANSISTOR		
	Q1107	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1108-09	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q1202	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q1231	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1351-53	2SC2371/MLK/	SI.TRANSISTOR		
	Q1422-24	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1425	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q1521	BSN274	F.E.T.		
⚠	Q1522	2SD1878-YD	SI.TRANSISTOR		H.OUT
	Q1523	2SC1815/YG/-T	SI.TRANSISTOR		
	Q1602	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1603	DTC124ESA-T	DIGI.TRANSISTOR		
	Q1604	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1605	DTC124ESA-T	DIGI.TRANSISTOR		
	Q1631	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1651	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1701	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q1702-03	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1751	DTA124ESA-T	DIGI.TRANSISTOR		
	Q1921	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q1941	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1942	DTC144GSA-T	DIGI.TRANSISTOR		
	Q1971	2SA966/OY/-T	SI.TRANSISTOR		
	Q1972	DTC144GSA-T	DIGI.TRANSISTOR		
	Q1981	2SA933AS/QR/-T	SI.TRANSISTOR		
	IC				
	IC1101	M52342SP	I.C.(MONO-ANA)		
	IC1201	TB1226EN	I.C.(DIGI-OTHER)		
	IC1421	LA7840	I.C.(MONO-ANA)		
	IC1651	AN5265	I.C.(MONO-ANA)		
	IC1701	M37212M8-050SP	I C		
	IC1702	AT24C04-K21M2L	I.C.		(SERVICE)
	IC1703	L78LR05E-MA	I.C.(MONO-ANA)		
	IC1751	PIC-21043SR	IFR DETECT UNIT		
⚠	IC1921	STR-F6653	I.C.(HYBRID)		
⚠	IC1941	S1854A	I.C.(MONO-ANA)		

⚠	Symbol No.	Part No.	Part Name	Description	Local
	IC				
	IC1971	KIA7812PI	I.C.(MONO-ANA)		
	IC1972	KIA7809PI	I.C.(MONO-ANA)		
	IC1973	KIA7805PI	I.C.(MONO-ANA)		
	OTHERS				
		LC30114-001C-H	L.E.D.HOLDER		
	CF1104	TPS5.5MW	CERAMIC FILTER		
	CF1105	TPS6.5MB	CERAMIC FILTER		
	CF1106	TPSH6.0MB	CERAMIC FILTER		
	CF1604	QAX0336-001	CERAMIC FILTER		
	CF1606	QAX0337-001	CERAMIC FILTER		
	CF1608	QAX0338-001	CERAMIC FILTER		
⚠	CP1942	ICP-N75-Y	I.C.PROTECT		
⚠	CP1943	ICP-N25-Y	I.C.PROTECT		
⚠	CP1944	ICP-N5-Y	I.C.PROTECT		
	EF1201	CE42142-222Z	EMI FILTER		
⚠	F1901	QMF51E2-3R15J4	FUSE		3.15A
	FC1901	CEMG002-001Z	FUSE CLIP		
⚠	FR1551	QRZ9017-4R7	F R	4.7 Ω 1/4W	J
⚠	FR1552	QRX029J-R47	MF R	0.47 Ω 2W	J
⚠	FR1554	QRZ9017-150	F R	15 Ω 1/4W	J
	J1001	CEMN075-001	PIN JACK		
	J1002	CEMN065-001	PIN JACK		
	J1004	CEMN065-002	PIN JACK		
	K1001	CE41433-001Z	BEADS CORE		
	K1201	CE41433-001Z	BEADS CORE		
	K1301	CE41433-001Z	BEADS CORE		
	K1422	CE41433-001Z	BEADS CORE		
	K1701-08	CE41433-001Z	BEADS CORE		
	K1921	CE41433-001Z	BEADS CORE		
	K1923	CE42050-001Z	CORE		
	K1941-43	CE42050-001Z	CORE		
⚠	LF1902	QQR0527-002	LINE FILTER		
⚠	PC1921	TLP721F(GR)	I.C.(PH.COUPLER)		
	S1401	QSL6A13-C01	LEVER SWITCH		
	S1751	QSP1A11-C18Z	PUSH SWITCH		CH PRESET
	S1752	QSP1A11-C18Z	PUSH SWITCH		CH -
	S1753	QSP1A11-C18Z	PUSH SWITCH		CH +
	S1754	QSP1A11-C18Z	PUSH SWITCH		VOL -
	S1755	QSP1A11-C18Z	PUSH SWITCH		VOL +
⚠	S1901	QSP4K21-C01	PUSH SWITCH		POWER SW
	SF1101	QAX0324-001	SAW FILTER		
	SF1102	QAX0325-001	SAW FILTER		
⚠	SK1351	CE42446-001	C.R.T.SOCKET		
⚠	TH1901	CEKP010-001J2	W.P.THERMISTOR		
	TU1001	CEEM574-B01	TUNER		
⚠	VA1901	ERZV10V621CS	VARISTOR		
	X1301	QAX0354-001	CRYSTAL		
	X1701	CST8.00MTW	CER.RESONATOR		

AV-K21T2(LB)

PRINTED WIRING BOARD PARTS LIST

MAIN PW BOARD ASS'Y (SCL-1221A-H2)

RESISTOR

⚠ Symbol No.	Part No.	Part Name	Description	Local
R1001-04	QRE141J-102Y	C R	1kΩ 1/4W	J
R1101	QRE141J-473Y	C R	47kΩ 1/4W	J
R1102	QRE141J-153Y	C R	15kΩ 1/4W	J
R1103	QRE141J-682Y	C R	6.8kΩ 1/4W	J
R1104	QRE141J-101Y	C R	100Ω 1/4W	J
R1108	QRE141J-750Y	C R	75Ω 1/4W	J
R1110	QRE141J-182Y	C R	1.8kΩ 1/4W	J
R1111	QRE141J-101Y	C R	100Ω 1/4W	J
R1116	QRE141J-104Y	C R	100kΩ 1/4W	J
R1117	QRE141J-272Y	C R	2.7kΩ 1/4W	J
R1118	QRE141J-273Y	C R	27kΩ 1/4W	J
R1119	QRE141J-224Y	C R	220kΩ 1/4W	J
R1120	QRE141J-822Y	C R	8.2kΩ 1/4W	J
R1123	QRE141J-151Y	C R	150Ω 1/4W	J
R1128	QRE141J-821Y	C R	820Ω 1/4W	J
R1129	QRE141J-181Y	C R	180Ω 1/4W	J
R1130	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1131	QRE141J-181Y	C R	180Ω 1/4W	J
R1132-33	QRE141J-331Y	C R	330Ω 1/4W	J
R1135	QRE141J-224Y	C R	220kΩ 1/4W	J
R1203	QRE141J-224Y	C R	220kΩ 1/4W	J
R1204-05	QRE141J-391Y	C R	390Ω 1/4W	J
R1206	QRE141J-103Y	C R	10kΩ 1/4W	J
R1208	QRE141J-681Y	C R	680Ω 1/4W	J
R1209	QRE141J-821Y	C R	820Ω 1/4W	J
R1210	QRE141J-122Y	C R	1.2kΩ 1/4W	J
R1232	QRE141J-101Y	C R	100Ω 1/4W	J
R1233	QRE121J-101Y	C R	100Ω 1/2W	J
R1234	QRE141J-680Y	C R	68Ω 1/4W	J
R1235	QRE141J-750Y	C R	75Ω 1/4W	J
R1303	QRE141J-273Y	C R	27kΩ 1/4W	J
R1304-06	QRE141J-101Y	C R	100Ω 1/4W	J
R1307-10	QRE141J-102Y	C R	1kΩ 1/4W	J
R1311	QRE141J-333Y	C R	33kΩ 1/4W	J
R1314-15	QRE141J-101Y	C R	100Ω 1/4W	J
R1351-53	QRE141J-151Y	C R	150Ω 1/4W	J
R1354	QRL029J-123	OM R	12kΩ 2W	J
R1355	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1356	QRE141J-331Y	C R	330Ω 1/4W	J
R1357	QRL029J-123	OM R	12kΩ 2W	J
R1358	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1359	QRE141J-331Y	C R	330Ω 1/4W	J
R1360	QRL029J-123	OM R	12kΩ 2W	J
R1361	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1362	QRE141J-331Y	C R	330Ω 1/4W	J
R1363	QRZ0107-152Z	C R	1.5kΩ 1/2W	K
R1364	QRE141J-182Y	C R	1.8kΩ 1/4W	J
R1365	QRE141J-101Y	C R	100Ω 1/4W	J
R1366	QRZ0107-152Z	C R	1.5kΩ 1/2W	K
R1367	QRE141J-101Y	C R	100Ω 1/4W	J
R1368	QRZ0107-152Z	C R	1.5kΩ 1/2W	K
R1369	QRE141J-101Y	C R	100Ω 1/4W	J
R1372	QRE141J-152Y	C R	1.5kΩ 1/4W	J
R1403	QRE141J-682Y	C R	6.8kΩ 1/4W	J
R1422	QRE141J-472Y	C R	4.7kΩ 1/4W	J
R1423	QRE141J-221Y	C R	220Ω 1/4W	J
R1425-26	QRE141J-333Y	C R	33kΩ 1/4W	J
R1427	QRE141J-103Y	C R	10kΩ 1/4W	J
R1429	QRE141J-562Y	C R	5.6kΩ 1/4W	J
R1430	QRE141J-103Y	C R	10kΩ 1/4W	J
R1431	QRE141J-822Y	C R	8.2kΩ 1/4W	J
R1432-33	QRE121J-4R7Y	C R	4.7Ω 1/2W	J
R1440	QRE121J-331Y	C R	330Ω 1/2W	J
R1441	QRE141J-682Y	C R	6.8kΩ 1/4W	J
R1442	QRE141J-822Y	C R	8.2kΩ 1/4W	J
R1443	QRE121J-1R0Y	C R	1.0Ω 1/2W	J
R1444	QRE121J-681Y	C R	680Ω 1/2W	J

⚠ Symbol No.	Part No.	Part Name	Description	Local
R1445	QRE121J-182Y	C R	1.8kΩ 1/2W	J
R1450	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1451	QRE141J-103Y	C R	10kΩ 1/4W	J
R1453	QRE141J-122Y	C R	1.2kΩ 1/4W	J
R1501	QRE141J-822Y	C R	8.2kΩ 1/4W	J
R1502	QRE141J-621Y	C R	620Ω 1/4W	J
R1504	QRE141J-103Y	C R	10kΩ 1/4W	J
R1505	QRE141J-104Y	C R	100kΩ 1/4W	J
R1506	QRG01GJ-121	OM R	120Ω 1W	J
R1522	QRE141J-123Y	C R	12kΩ 1/4W	J
R1523	QRE121J-222Y	C R	2.2kΩ 1/2W	J
R1524	QRG029J-222	OM R	2.2kΩ 2W	J
R1525	QRG029J-272	OM R	2.7kΩ 2W	J
R1526	QRE121J-220Y	C R	22Ω 1/2W	J
R1529	QRG029J-391	OM R	390 Ω 2W	J
R1582	QRE141J-153Y	C R	15kΩ 1/4W	J
R1583	QRE141J-123Y	C R	12kΩ 1/4W	J
R1591	QRE141J-273Y	C R	27kΩ 1/4W	J
R1594	QRE141J-332Y	C R	3.3kΩ 1/4W	J
R1601	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1602	QRE141J-332Y	C R	3.3kΩ 1/4W	J
R1603	QRE141J-103Y	C R	10kΩ 1/4W	J
R1607-08	QRE141J-561Y	C R	560Ω 1/4W	J
R1609	QRE141J-471Y	C R	470Ω 1/4W	J
R1610	QRE141J-332Y	C R	3.3kΩ 1/4W	J
R1611	QRE141J-152Y	C R	1.5kΩ 1/4W	J
R1612	QRE141J-471Y	C R	470Ω 1/4W	J
R1615	QRE141J-561Y	C R	560Ω 1/4W	J
R1616	QRE141J-220Y	C R	22Ω 1/4W	J
R1617	QRE141J-821Y	C R	820Ω 1/4W	J
R1631	QRE141J-681Y	C R	680Ω 1/4W	J
R1632	QRE141J-181Y	C R	180Ω 1/4W	J
R1634	QRE141J-472Y	C R	4.7kΩ 1/4W	J
R1636	QRE141J-473Y	C R	47kΩ 1/4W	J
R1637	QRE141J-393Y	C R	39kΩ 1/4W	J
R1638	QRE141J-102Y	C R	1kΩ 1/4W	J
R1653	QRE141J-183Y	C R	18kΩ 1/4W	J
R1654	QRE141J-222Y	C R	2.2kΩ 1/4W	J
R1655	QRE141J-822Y	C R	8.2kΩ 1/4W	J
R1656	QRE141J-101Y	C R	100Ω 1/4W	J
R1657	QRE141J-393Y	C R	39kΩ 1/4W	J
R1658	QRE141J-103Y	C R	10kΩ 1/4W	J
R1659	QRE141J-153Y	C R	15kΩ 1/4W	J
R1660	QRE141J-331Y	C R	330Ω 1/4W	J
R1661	QRE121J-4R7Y	C R	4.7Ω 1/2W	J
R1662	QRE141J-102Y	C R	1kΩ 1/4W	J
R1663	QRE141J-472Y	C R	4.7kΩ 1/4W	J
R1664	QRX01GJ-2R7	MF R	2.7Ω 1W	J
R1701	QRE141J-473Y	C R	47kΩ 1/4W	J
R1702	QRB089J-682	NETW.R	6.8kΩ	
R1703	QRE141J-682Y	C R	6.8kΩ 1/4W	J
R1704-05	QRE141J-561Y	C R	560Ω 1/4W	J
R1706	QRE141J-821Y	C R	820Ω 1/4W	J
R1707-08	QRE141J-103Y	C R	10kΩ 1/4W	J
R1709	QRE141J-223Y	C R	22kΩ 1/4W	J
R1710	QRE141J-682Y	C R	6.8kΩ 1/4W	J
R1711	QRE141J-103Y	C R	10kΩ 1/4W	J
R1712	QRE141J-563Y	C R	56kΩ 1/4W	J
R1713	QRE141J-223Y	C R	22kΩ 1/4W	J
R1714	QRE141J-103Y	C R	10kΩ 1/4W	J
R1719-22	QRE141J-562Y	C R	5.6kΩ 1/4W	J
R1724	QRE141J-682Y	C R	6.8kΩ 1/4W	J
R1725	QRB089J-682	NETW.R	6.8kΩ	
R1728	QRE141J-682Y	C R	6.8kΩ 1/4W	J
R1733-36	QRE141J-221Y	C R	220Ω 1/4W	J
R1737	QRE141J-124Y	C R	120kΩ 1/4W	J
R1738	QRE141J-683Y	C R	68kΩ 1/4W	J

RESISTOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	R1739	QRE141J-103Y	C R	10kΩ 1/4W	J
	R1740-44	QRE141J-221Y	C R	220Ω 1/4W	J
	R1746	QRE141J-473Y	C R	47kΩ 1/4W	J
	R1747-48	QRE141J-682Y	C R	6.8kΩ 1/4W	J
	R1751	QRE141J-103Y	C R	10kΩ 1/4W	J
	R1752	QRE141J-332Y	C R	3.3kΩ 1/4W	J
	R1753	QRE141J-682Y	C R	6.8kΩ 1/4W	J
	R1754	QRE141J-103Y	C R	10kΩ 1/4W	J
	R1755	QRE141J-332Y	C R	3.3kΩ 1/4W	J
	R1756-57	QRE141J-681Y	C R	680Ω 1/4W	J
	R1815	QRE141J-103Y	C R	10kΩ 1/4W	J
⚠	R1901	QRF104K-3R9	UNF R	3.9Ω 10W	K
	R1902	QRL039J-683	OM R	68kΩ 3W	J
	R1921	QRE121J-681Y	C R	680Ω 1/2W	J
	R1922	QRX029J-1R5	MF R	1.5Ω 2W	J
	R1923	QRM059J-R27	MP R	0.27 Ω 5W	J
	R1924	QRE121J-103Y	C R	10kΩ 1/2W	J
	R1925	QRE121J-102Y	C R	1kΩ 1/2W	J
	R1926	QRE121J-272Y	C R	2.7kΩ 1/2W	J
	R1927	QRE121J-103Y	C R	10kΩ 1/2W	J
	R1928	QRG029J-473	OM R	47kΩ 2W	J
	R1929	QRE121J-332Y	C R	3.3kΩ 1/2W	J
	R1932	QRE121J-824Y	C R	820kΩ 1/2W	J
⚠	R1933	QRZ9017-3R3	FUSI.R	3.3 Ω 1/4W	J
	R1934	QRE121J-393Y	C R	39kΩ 1/2W	J
	R1935	QRE121J-272Y	C R	2.7kΩ 1/2W	J
	R1941	QRE121J-152Y	C R	1.5kΩ 1/2W	J
	R1943	QRE141J-472Y	C R	4.7kΩ 1/4W	J
	R1944	QRE121J-332Y	C R	3.3kΩ 1/2W	J
	R1946	QRE141J-153Y	C R	15kΩ 1/4W	J
	R1970	QRG01GJ-150	OM R	15Ω 1W	J
	R1971	QRE121J-223Y	C R	22kΩ 1/2W	J
	R1972	QRE121J-152Y	C R	1.5kΩ 1/2W	J
	R1973	QRL029J-270	OM R	27Ω 2W	J
	R1974	QRE141J-222Y	C R	2.2kΩ 1/4W	J
	R1975	QRE141J-123Y	C R	12kΩ 1/4W	J
	R1976	QRJ146J-680X	C R	68Ω 1/4W	J
	R1977	QRG029J-183	OM R	18kΩ 2W	J
	R1979	QRL029J-270	OM R	27Ω 2W	J
	R1980	QRE141J-821Y	C R	820Ω 1/4W	J
	R1981	QRE141J-222Y	C R	2.2kΩ 1/4W	J
	R1982	QRE141J-822Y	C R	8.2kΩ 1/4W	J
	R1983	QRE141J-102Y	C R	1kΩ 1/4W	J
	R1984	QRE141J-822Y	C R	8.2kΩ 1/4W	J
⚠	R1991	QRZ0057-825	C R	8.2MΩ 1W	J

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C1001	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C1002	QETN1CM-108Z	E CAP.	1000µF 16V	M
	C1003	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1004	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1005-07	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1015	QCB31HK-222Z	C CAP.	2200pF 50V	K
	C1016	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
	C1101-04	QCB31HK-472Z	C CAP.	4700pF 50V	K
	C1110-11	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1112	QFLC1HJ-104Z	M CAP.	0.1µF 50V	J
	C1113	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1114	QETN1HM-474Z	E CAP.	0.47µF 50V	M
	C1116	QETN1HM-474Z	E CAP.	0.47µF 50V	M
	C1118	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1119-20	QETN1CM-476Z	E CAP.	47µF 16V	M
	C1121	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1122	QETN1CM-476Z	E CAP.	47µF 16V	M
	C1124	QETN1CM-476Z	E CAP.	47µF 16V	M
	C1135	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1136	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
	C1201	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1202	QFLC1HJ-104Z	M CAP.	0.1µF 50V	J

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C1203	QETN1HM-105Z	E CAP.	1µF 50V	M
	C1204	QFLC1HJ-104Z	M CAP.	0.1µF 50V	J
	C1205	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C1206	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1207	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1208	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1209	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1210	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1212	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1213	QEN61CM-106Z	BP E CAP.	10µF 16V	M
	C1231	QETN1CM-227Z	E CAP.	220µF 16V	M
	C1232	QETN1CM-477Z	E CAP.	470µF 16V	M
	C1253	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1301	QFLC1HJ-473Z	M CAP.	0.047µF 50V	J
	C1302	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1303	QDC31HJ-120Z	C CAP.	12pF 50V	J
	C1304-06	QFLC1HJ-104Z	M CAP.	0.1µF 50V	J
	C1307	QETN1HM-225Z	E CAP.	2.2µF 50V	M
	C1308	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1309	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C1310	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1311	QETN1AM-107Z	E CAP.	100µF 10V	M
	C1312	QETN1CM-227Z	E CAP.	220µF 16V	M
	C1313	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1316	QCS31HJ-101Z	C CAP.	100pF 50V	J
	C1320	QCS31HJ-101Z	C CAP.	100pF 50V	J
	C1351	QETN1AM-477Z	E CAP.	470µF 10V	M
	C1353	QCB31HK-331Z	C CAP.	330pF 50V	K
	C1355	QCB31HK-331Z	C CAP.	330pF 50V	K
	C1357	QCB31HK-391Z	C CAP.	390pF 50V	K
	C1359	QFZ0097-103	MM CAP.	0.01µF 1250V	K
	C1360	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
	C1402	QEM61HK-225Z	E CAP.	2.2µF 50V	K
	C1405	QETN1HM-105Z	E CAP.	1µF 50V	M
	C1422	QFN31HJ-182Z	M CAP.	1800pF 50V	J
	C1423	QFLC2AJ-473Z	M CAP.	0.047µF 100V	J
	C1427-28	QETN1VM-107Z	E CAP.	100µF 35V	M
	C1430	QFLC2AJ-103Z	M CAP.	0.01µF 100V	J
	C1433	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C1435	QETM1EM-108	E CAP.	1000µF 25V	M
	C1436	QFV71HJ-334Z	MF CAP.	0.33µF 50V	J
	C1437	QFN31HJ-102Z	M CAP.	1000pF 50V	J
	C1450	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1501	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1502	QETN1HM-105Z	E CAP.	1µF 50V	M
	C1503	QETN1AM-108Z	E CAP.	1000µF 10V	M
	C1504-06	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1507	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
	C1508	QETN1CM-476Z	E CAP.	47µF 16V	M
	C1509-10	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1521	QCB32HK-151Z	C CAP.	150pF 500V	K
	C1522	QCB32HK-102Z	C CAP.	1000pF 500V	K
	C1523	QEHC2CM-105Z	E CAP.	1µF 160V	M
⚠	C1524	QFZ0117-1102	MPP CAP.	0.011µF1.4kVH±2.5%	
⚠	C1527	QFZ0151-514	MPP CAP.	0.51µF 200V ±3%	
	C1552	QETM1EM-108	E CAP.	1000µF 25V	M
	C1557	QETN2EM-225Z	E CAP.	2.2µF 250V	M
	C1571	QEHB2CM-476	E CAP.	47µF 160V	M
	C1581	QFLC1HJ-104Z	M CAP.	0.1µF 50V	J
	C1591	QETN1AM-227Z	E CAP.	220µF 10V	M
	C1601	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1602	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
	C1606	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1607	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1608-10	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1631-32	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1651	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1652	QFN31HJ-102Z	M CAP.	1000pF 50V	J
	C1653	QENC1HM-105Z	BP E CAP.	1µF 50V	M
	C1656	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1657	QETN1CM-227Z	E CAP.	220µF 16V	M
	C1659	QFLC1HJ-473Z	M CAP.	0.047µF 50V	J

CAPACITOR

⚠	Symbol No.	Part No.	Part Name	Description	Local
	C1661-62	QETN1HM-475Z	E CAP.	4.7µF 50V	M
	C1663	QETN1EM-227Z	E CAP.	220µF 25V	M
	C1701	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1702	QFLC1HJ-104Z	M CAP.	0.1µF 50V	J
	C1703	QETN1CM-476Z	E CAP.	47µF 16V	M
	C1704	QFN31HJ-102Z	M CAP.	1000pF 50V	J
	C1705	QETN1AM-107Z	E CAP.	100µF 10V	M
	C1707	QCB31HK-272Z	C CAP.	2700pF 50V	K
	C1708	QFN31HJ-222Z	M CAP.	2200pF 50V	J
	C1709	QCS31HJ-560Z	C CAP.	56pF 50V	J
	C1710	QCB31HK-103Z	C CAP.	0.01µF 50V	K
	C1711	QFLC1HJ-104Z	M CAP.	0.1µF 50V	J
	C1712	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1713	QCS31HJ-181Z	C CAP.	180pF 50V	J
	C1714	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
	C1715	QFLC1HJ-473Z	M CAP.	0.047µF 50V	J
	C1721	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1723-27	QCS31HJ-181Z	C CAP.	180pF 50V	J
	C1728-30	QFLC1HJ-103Z	M CAP.	0.01µF 50V	J
	C1751	QETN1CM-476Z	E CAP.	47µF 16V	M
⚠	C1902	QFZ9040-104	MF CAP.	0.1µFAC275V	M
⚠	C1904	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠	C1905	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠	C1906	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠	C1907	QCZ9085-102	C CAP.	1000pFAC250V	K
⚠	C1909	QEZ0199-127	E CAP.	120µF 400V	M
⚠	C1910	QFZ9040-473	MF CAP.	0.047µFAC275V	M
	C1921	QCZ0325-102	C CAP.	1000pF 2kV	K
	C1922	QFN31HJ-102Z	M CAP.	1000pF 50V	J
	C1924	QETN1EM-107Z	E CAP.	100µF 25V	M
	C1925	QFN31HJ-102Z	M CAP.	1000pF 50V	J
	C1926	QFN31HJ-222Z	M CAP.	2200pF 50V	J
	C1929	QCB32HK-103	C CAP.	0.01µF 500V	K
	C1930	QCZ0122-151	C CAP.	150pF 2kV	K
	C1931	QCZ0122-271	C CAP.	270pF 2kV	K
	C1941	QCZ0122-561	C CAP.	560pF 2kV	K
	C1942	QEZ0203-107	E CAP.	100µF 160V	M
	C1944	QCB32HK-561Z	C CAP.	560pF 500V	K
	C1945	QETN1CM-108Z	E CAP.	1000µF 16V	M
	C1947	QCB32HK-561Z	C CAP.	560pF 500V	K
	C1948	QETN1EM-477Z	E CAP.	470µF 25V	M
	C1949	QCB31HK-222Z	C CAP.	2200pF 50V	K
	C1950	QFLC1HJ-104Z	M CAP.	0.1µF 50V	J
	C1971	QETN1HM-106Z	E CAP.	10µF 50V	M
	C1972	QETN1EM-477Z	E CAP.	470µF 25V	M
	C1974	QETM1EM-108	E CAP.	1000µF 25V	M
	C1975	QETN1EM-107Z	E CAP.	100µF 25V	M
	C1976-77	QETN1CM-107Z	E CAP.	100µF 16V	M
	C1978	QETN1AM-107Z	E CAP.	100µF 10V	M
⚠	C1991	QCZ9079-471	C CAP.	470pFAC250V	K
⚠	C1992	QCZ9079-471	C CAP.	470pFAC250V	K
⚠	C1993	QCZ9079-222	C CAP.	2200pFAC250V	M

TRANSFORMER

⚠	Symbol No.	Part No.	Part Name
	T1101	CELT001-303J3	C.WAVE TRANSF.
	T1521	CE42034-001	H.DRIVE TRANSF.
⚠	T1522	QQH0021-001	FLYBACK TRANSF.
⚠	T1921	CETS093-001JF	SWITCH.TRANSF.

COIL

Symbol No.	Part No.	Part Name	Description	Local
L1001	QQL244K-8R2Z	COIL	8.2µH	K
L1105	QQL244K-8R2Z	COIL	8.2µH	K
L1106	QQL244K-100Z	COIL	10µH	K
L1301-02	QQL244K-470Z	COIL	47µH	K
L1303	QQL244K-4R7Z	COIL	4.7µH	K
L1351-53	QQL244K-820Z	COIL	82µH	K
L1551	QQLZ018-540	HEATER CHOKE		
L1701	QQL244K-5R6Z	COIL	5.6µH	K
L1941-42	QQL42AK-820Z	COIL	82µH	K

DIODE

⚠	Symbol No.	Part No.	Part Name	Description	Local
	D1001	MTZJ33A-T2	ZENER DIODE		
	D1203	1SS133-T2	SI.DIODE		
	D1231-32	MTZJ13B-T2	ZENER DIODE		
	D1421	1SS133-T2	SI.DIODE		
	D1423	1SR124-400A-T2	SI.DIODE		
	D1425	1SS133-T2	SI.DIODE		
	D1501	MTZJ9.1B-T2	ZENER DIODE		
	D1502	MTZJ5.1B-T2	ZENER DIODE		
	D1551	RGP10J-5025-T3	SI.DIODE		
	D1553	RH1S-T3	SI.DIODE		
	D1582	RGP10J-5025-T3	SI.DIODE		
	D1601	MTZJ6.8A-T2	ZENER DIODE		
	D1602	MTZJ6.2B-T2	ZENER DIODE		
	D1631	MTZJ6.2B-T2	ZENER DIODE		
	D1633	MTZJ9.1C-T2	ZENER DIODE		
	D1652	1SS133-T2	SI.DIODE		
	D1701-03	1SS133-T2	SI.DIODE		
	D1705	1SS133-T2	SI.DIODE		
	D1706-09	MTZJ8.2B-T2	ZENER DIODE		
	D1739	MTZJ8.2B-T2	ZENER DIODE		
	D1751	SLR-342VR-T16	L.E.D.		
	D1752	SLR-342DU-T16	L.E.D.(ORG)		
⚠	D1901	D2SBA60	BRIDGE DIODE		
	D1921-22	1SR124-400A-T2	SI.DIODE		
	D1923	MTZJ15A-T2	ZENER DIODE		
	D1924	1SR124-400A-T2	SI.DIODE		
	D1926	RU1C-LFC4	SI.DIODE		
	D1927	MTZJ6.8A-T2	ZENER DIODE		
	D1928	1SS133-T2	SI.DIODE		
	D1929	MTZJ15A-T2	ZENER DIODE		
	D1941	RU3AM-LFC4	SI.DIODE		
	D1942	RU3YX-LFC4	SI.DIODE		
	D1943	RGP10J-5025-T3	SI.DIODE		
	D1945	MTZJ6.2B-T2	ZENER DIODE		
	D1971	1SR124-400A-T2	SI.DIODE		
	D1981-84	1SS133-T2	SI.DIODE		
	D1985	MTZJ12C-T2	ZENER DIODE		

TRANSISTOR

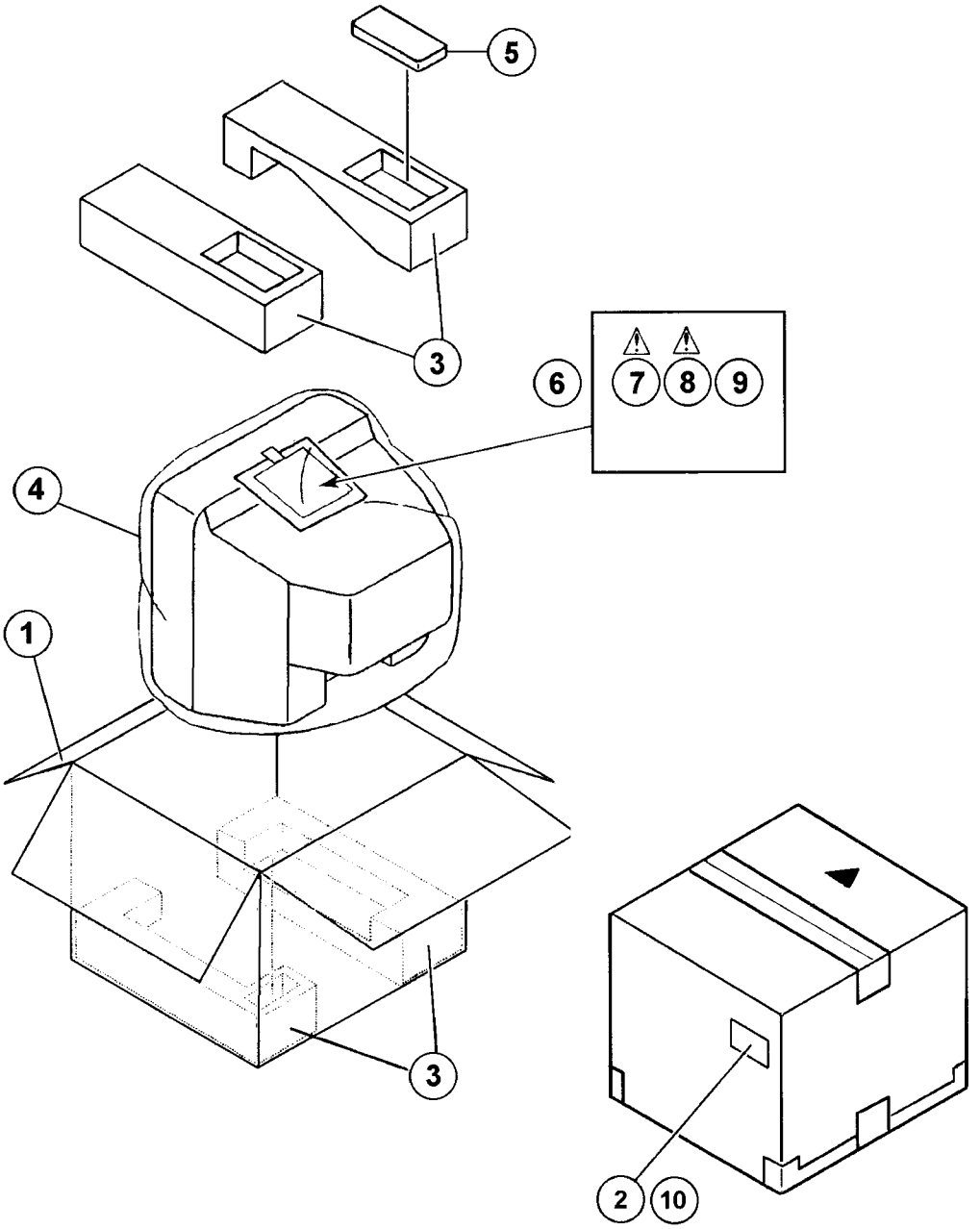
⚠	Symbol No.	Part No.	Part Name	Description	Local
	Q1101	2SC5083/L-P/-T	SI.TRANSISTOR		
	Q1107	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1108-09	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q1202	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q1231	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1351-53	2SC2371/MLK/	SI.TRANSISTOR		
	Q1422-24	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1425	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q1521	BSN274	F.E.T.		
⚠	Q1522	2SD1878-YD	SI.TRANSISTOR		H.OUT
	Q1523	2SC1815/YG/-T	SI.TRANSISTOR		
	Q1602	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1603	DTC124ESA-T	DIGI.TRANSISTOR		
	Q1604	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1605	DTC124ESA-T	DIGI.TRANSISTOR		
	Q1631	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1651	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1701	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q1702-03	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1751	DTA124ESA-T	DIGI.TRANSISTOR		
	Q1921	2SA933AS/QR/-T	SI.TRANSISTOR		
	Q1941	2SC1740S/QR/-T	SI.TRANSISTOR		
	Q1942	DTC144GSA-T	DIGI.TRANSISTOR		
	Q1971	2SA966/OY/-T	SI.TRANSISTOR		
	Q1972	DTC144GSA-T	DIGI.TRANSISTOR		
	Q1981	2SA933AS/QR/-T	SI.TRANSISTOR		

IC

Symbol No.	Part No.	Part Name
IC1101	M52342SP	I.C.(MONO-ANA)
IC1201	TB1226EN	I.C.(DIGI-OTHER)
IC1421	LA7840	I.C.(MONO-ANA)
IC1651	AN5265	I.C.(MONO-ANA)

⚠	Symbol No.	Part No.	Part Name	Description	Local
	IC				
	IC1701	M37212M8-050SP	I C		
	IC1702	AT24C04-K21M2L	I.C.	(SERVICE)	
	IC1703	L78LR05E-MA	I.C.(MONO-ANA)		
	IC1751	PIC-21043SR	IFR DETECT UNIT		
⚠	IC1921	STR-F6653	I.C.(HYBRID)		
⚠	IC1941	S1854A	I.C.(MONO-ANA)		
	IC1971	KIA7812PI	I.C.(MONO-ANA)		
	IC1972	KIA7809PI	I.C.(MONO-ANA)		
	IC1973	KIA7805PI	I.C.(MONO-ANA)		
	OTHERS				
		LC30114-001C-H	L.E.D.HOLDER		
	CF1104	TPS5.5MW	CERAMIC FILTER		
	CF1105	TPS6.5MB	CERAMIC FILTER		
	CF1106	TPSH6.0MB	CERAMIC FILTER		
	CF1604	QAX0336-001	CERAMIC FILTER		
	CF1606	QAX0337-001	CERAMIC FILTER		
	CF1608	QAX0338-001	CERAMIC FILTER		
⚠	CP1942	ICP-N75-Y	I.C.PROTECT		
⚠	CP1943	ICP-N25-Y	I.C.PROTECT		
⚠	CP1944	ICP-N5-Y	I.C.PROTECT		
	EF1201	CE42142-222Z	EMI FILTER		
⚠	F1901	QMF51E2-3R15J4	FUSE	3.15A	
	FC1901	CEMG002-001Z	FUSE CLIP		
⚠	FR1551	QRZ9017-4R7	F R	4.7 Ω 1/4W J	
⚠	FR1552	QRX029J-R47	MF R	0.47 Ω 2W J	
⚠	FR1554	QRZ9017-150	F R	15 Ω 1/4W J	
	J1001	CEMN075-001	PIN JACK		
	J1002	CEMN065-001	PIN JACK		
	J1004	CEMN065-002	PIN JACK		
	K1001	CE41433-001Z	BEADS CORE		
	K1201	CE41433-001Z	BEADS CORE		
	K1301	CE41433-001Z	BEADS CORE		
	K1422	CE41433-001Z	BEADS CORE		
	K1701-08	CE41433-001Z	BEADS CORE		
	K1921	CE41433-001Z	BEADS CORE		
	K1923	CE42050-001Z	CORE		
	K1941-43	CE42050-001Z	CORE		
⚠	LF1902	QQR0527-002	LINE FILTER		
⚠	PC1921	TLP721F(D4-GR)	I.C.(PH.COUPLER)		
	S1401	QSL6A13-C01	LEVER SWITCH		
	S1751	QSP1A11-C18Z	PUSH SWITCH	CH PRESET	
	S1752	QSP1A11-C18Z	PUSH SWITCH	CH -	
	S1753	QSP1A11-C18Z	PUSH SWITCH	CH +	
	S1754	QSP1A11-C18Z	PUSH SWITCH	VOL -	
	S1755	QSP1A11-C18Z	PUSH SWITCH	VOL +	
⚠	S1901	QSP4K21-C01	PUSH SWITCH	POWER SW	
	SF1101	QAX0324-001	SAW FILTER		
	SF1102	QAX0325-001	SAW FILTER		
⚠	SK1351	CE42446-001	C.R.T.SOCKET		
⚠	TH1901	CEKP010-001J2	W.P.THERMISTOR		
	TU1001	CEEM574-B01	TUNER		
⚠	VA1901	ERZV10V621CS	VARISTOR		
	X1301	QAX0354-001	CRYSTAL		
	X1701	CST8.00MTW	CER.RESONATOR		

PACKING



PACKING PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
	1	CP11781-021-H	PACKING CASE	[AV-K21T2(L)/AV-K21T2(LB)]	
	1	CP11781-033-H	PACKING CASE	[AV-K21T2(L)-A]	
	1	CP11781-034-H	PACKING CASE	[AV-2131EE(L)]	
	1	CP11781-022-H	PACKING CASE	[Other models]	
	2	CM47385-00B-H	POS/SERIAL LABEL		
	3	CP11637-00B-H	CUSHION ASSY	4pcs in 1set	
	4	CP30697-005-H	POLY BAG		
	5	RM-C360-1H	REMOCON UNIT		
	6	QPGA025-03505H	POLY BAG		
⚠	7	LCT0276-001A-H	INST BOOK	[AV-K21M2(L)/AV-K21M2(L)-A] [AV-K21M2(LB)] [AV-K21T2(L)/AV-K21T2(L)-A] [AV-K21T2](LB)]	
⚠	7	LCT0282-001A-H	INST BOOK	[AV-K21M2(L)-HK]	
⚠	7	LCT0285-001A-H	INST BOOK	[AV-2131EE(L)]	
	8	LCT0277-001A-H	DIGEST MANUAL	[AV-K21M2(L)/AV-K21M2(LB)]	
	8	LCT0279-001A-H	DIGEST MANUAL	[AV-K21M2(L)-A/AV-K21T2(L)-A]	
	8	LCT0278-001A-H	DIGEST MANUAL	[AV-K21T2(L)/AV-K21T2(LB)] [AV-2131EE(L)]	
	9	QAM0055-001	CONVERSION PLUG	[Only AV-K21M2(L)-A/AV-K21T2(L)-A]	
	10	BT-54012-1	WARRANTY CARD	[Only AV-2131EE(L)]	

REMOTE CONTROL UNIT (RM-C360-1H)

⚠	Ref.No.	Part No.	Part Name	Description	Local
		25-1168 B	BATTERY COVER		

JVC
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AVK21M2L-H	#4	AVK21M2A-H	#3	AVK21M2LHK-H	#3	AVK21M2LB-H	#999
AVK21T2L-H	#4	AVK21M2A-H	#3	AV2131EEL-H	#3	AVK21T2LB-H	#3

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